

MICHIGAN CANCER SURVEILLANCE PROGRAM

Cancer Reporting Manual

Effective for January 1, 2007 diagnoses to date.



Michigan Department of Community Health
Public Health Administration

Division for Vital Records and Health Statistics

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CANCER REPORTING MANUAL

Effective for January 1, 2007 diagnoses to date.

Michigan Department of Community Health
Michigan Cancer Surveillance Program

DCH-0916
By Authority of Act 82, P.A. 1984

MICHIGAN CANCER SURVEILLANCE PROGRAM CANCER REPORTING MANUAL

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INTRODUCTION

The Michigan Department of Community Health is mandated by Act 82 of 1984, effective July 1, 1984, to establish a cancer registry for the state of Michigan. This statute states “the department shall establish a registry to record cases of cancer and other specified tumorous and precancerous diseases that occur in the state, and to record information concerning these cases as the department considers necessary and appropriate in order to conduct epidemiologic surveys of cancer and cancer-related diseases in the state.”

Reports of diagnosed cancers are required of a facility diagnosing and/or treating a cancer patient. All hospitals, clinical laboratories, physician offices, dentists and clinic directors who have knowledge of a case of cancer shall report the case to the Michigan Department of Community Health.

Reporting of diagnosed cancers statewide is effective for those cases diagnosed on or after January 1, 1985. This manual is intended to provide those responsible for reporting with specific instructions on the proper and complete reporting of cancer diagnoses.

In October 1, 2004, the MCSP started collecting benign borderline intracranial and CNS tumors.

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HISTORY OF THE MICHIGAN CENTRAL CANCER REGISTRY

The history of cancer reporting in Michigan dates back to 1947 when an administrative rule was enacted to require the reporting of cancer cases. This rule was never effectively enforced until 1978, when a governor's task force was empanelled to examine the need for cancer reporting in Michigan. The recommendations from this panel prompted the department in 1980, to initiate a pilot program. By 1984, 52 hospitals were reporting cancer cases on a voluntary basis, which resulted in approximately 6,000 cases being reported each year. As the pilot project progressed, legislation to require state wide reporting was developed. On April 17, 1984, a bill to mandate state wide reporting was signed into law.

A panel was assembled to develop and design the rules for reporting incidence of cancer to the state wide central cancer registry. In 1984, the "Task Force on Administrative Rules to Implement Act 82" began meeting. The task force consisted of professional groups throughout the state who in some way dealt with cancer patients or cancer data systems. In addition, public health officials involved in health programs concerned with cancer control, and individuals involved with epidemiological cancer research, were also assigned to the task force.

The objective of the task force was to "provide advice to the department on a set of administrative rules as required by the authorizing legislation." This panel made recommendations on data items to be collected, methods of reporting, quality control issues, confidentiality, as well as rules for reporting facilities. These cancer reporting rules were developed and outlined in the original Cancer Reporting Manual 1984, which was approved by the original task force. On January 1, 1985, the rules for reporting cancer cases went into effect.

The Michigan Cancer Surveillance Program (MCSP) began tabulating cancer incidence reports on January 1, 1985. By the end of 2005, the state central cancer registry contained 1.5 million reports with 1 million individual cancer cases. These cases represent approximately 180 reporting facilities, which include hospitals, physician offices and laboratories.

The Detroit Metropolitan Cancer Surveillance System operates a Surveillance Epidemiology End Results (SEER) registry which reports for all hospitals and most laboratories within Oakland, Macomb, and Wayne counties. The SEER registry represents approximately 100 hospitals and laboratories in these three counties. Other regional registries include the West Michigan Cancer Center in Kalamazoo and the cancer registry at Marquette General Hospital in Marquette.

Facilities report cancer cases to the state central cancer registry either manually on paper or automated with computer data files. Hospital registries are becoming more sophisticated in their collection and transferal methods since the state cancer registry began in 1985. As of October 2006, approximately 90 percent of the cases from hospitals and regional registries are involved in an automated reporting system. Automated facilities send their data to the state registry either by floppy disk, compact diskette or via a FTP site.

State cancer data is compiled and analyzed every year. An annual report is produced using the submitted data and is available on our website at www.michigan.gov/mdch. To date, nineteen annual reports have been published for the years 1985 through 2006. As new annual reports are prepared, updated data for prior years is developed and released to ensure that the most complete information is made available. Processing time for a report from diagnosis to manual statistics is approximately two years.

PURPOSE

A state wide population based cancer registry is the only means whereby state wide incidence data for cancers by type and by area of residence can be developed. Timely information on cancer cases is employed as a basis for cancer surveillance, as a tool for initial evaluation of cancer incidence within regions of particular interest, and as a source of baseline incidence data. The registry is of value in examining the frequency of cancer by demographic characteristics such as age, race and sex and is of significant value to researchers in epidemiological case control studies. This data is also helpful in the areas of planning health education and addressing public health concerns.

CONFIDENTIALITY

Cancer incidence reports and data files on cancer cases which are received by the department are afforded confidential handling as required by Act 82 of 1984, being section 2631 of Act 368 of 1978 as amended, and by administrative rule. The release of data in identifiable form is specifically prohibited, except as outlined in Rule Four. Under the rules, release of this data or reports is permitted to the individual patient or to the patient's legal representative. Information may be provided to a researcher conducting approved research, following specific protocol based upon the nature of the research. Release is permitted to a cancer registry from another state with regard to residents of that state so long as the state agrees to restrict the use of the information to statistical tabulations. Further protection of the data is afforded by sections 2632 and 2633 of Act 368 of 1978 which designates that the reports or information thereon are inadmissible as evidence in a court and which establishes a shield from liability for furnishing the information. In addition, the privacy regulations enacted in conjunction with the Health Insurance Portability and Accountability Act (HIPAA) has a specific exemption to permit disclosing identifiable patient data to the official public health agency of a state

REVISED REPORTING REQUIREMENTS

On October 1, 2006 changes to the information being reported on each cancer case were initiated. These new reporting standards are designed to ensure that the registry in Michigan conforms as closely to central incidence registries operated in other states. The new data set collected conforms to the items recommended for collection by the North American Association of Central Cancer Registries (NAACCR) and are nearly the same as the recommendations by the National Program for Cancer Registries (NPCR).

The decision to change the reporting requirements was precipitated by two important developments. The first was the release of standards for the operation of a central registry which were produced by NAACCR in 2006. Concurrent with the release of these new standards were recommendations on standard items for collection released by NPCR within the Centers for Disease Control. The information being collected in Michigan did not conform to these two new sets of standards. It was apparent that the long term usefulness of the state central cancer registry hinged upon careful review of the new standards and the development of specific recommendations for implementation in Michigan.

The initial structure for cancer reporting used in Michigan was developed in consultation with an "ad hoc task force" with members representing key organizations of cancer care and cancer research in Michigan. This group provided counsel on a number of important matters that needed to be addressed when the registry was first established. These issues included determining who was responsible for reporting, the

manner the information was to be reported, timeliness requirements, and finally the items to be reported. The advice of this group proved to be an important key to the success of the state wide cancer registry. This same approach was adopted with regard to re-evaluating the basic operational principles for the Michigan registry in light of the recommendations of NAACCR and NPCR.

The standards set forth by the Commission on Cancer (COC) were also taken under advisement. A strategy for required data sets takes place in a tiered priority which conforms to the requirements of the COC. Those facilities approved by the COC, are required to submit more detailed information, which includes further information on staging and treatment. Those facilities with COC approved cancer registries are perceived to have the ability of their staff to supply the central registry with this further information. A table has been developed to distinguish the reporting requirements for approved facilities, non-approved facilities and laboratories.

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Act No. 82
Public Acts of 1984
Approved by the Governor
April 17, 1984

Filed with the Secretary of State
April 19, 1984

**STATE OF MICHIGAN
82ND LEGISLATURE
REGULAR SESSION OF 1984**

Introduced by Reps. Spaniola, Hertel, Barns, Dutko, Porreca, Sitz, Maynard and DeMars

ENROLLED HOUSE BILL No. 4090

AN ACT to amend Act No. 368 of the Public Acts of 1978, entitled "An act to protect and promote the public health; to codify, revise, consolidate, classify, and add to the laws relating to public health; to provide for the prevention and control of diseases and disabilities; to provide for the classification, administration, regulation, financing, and maintenance of personal, environmental, and other health services and activities; to create or continue, and prescribe the powers and duties of, departments, boards, commissions, councils, committees, task forces, and other agencies; to prescribe the powers and duties for governmental entities and officials; to regulate occupations, facilities, and agencies affecting the public health; to promote the efficient and economical delivery of health care services, to provide for the appropriate utilization of health care facilities and services, and to provide for the closure of hospitals or consolidation of hospitals or services; to provide for the collection and use of data and information; to provide for the transfer of property; to provide the certain immunity from liability; to provide for penalties and remedies; and to repeal certain acts and parts of acts," as amended, being sections 333.1101 to 333.25211 of the Michigan Compiled Laws, by adding section 2619.

The People of the State of Michigan enact:

Section 1. Act No. 368 of the Public Acts of 1978, as amended, being sections 333.1101 to 333.25211 of the Michigan Compiled Laws, is amended by adding section 2619 to read as follows:

Sec. 2619. (1) The department shall establish a registry to record cases of cancer and other specified tumorous and precancerous diseases that occur in the state, and to record information concerning these cases as the department considers necessary and appropriate in order to conduct epidemiologic surveys of cancer and cancer-related diseases in the state.

(2) Each diagnosed case of cancer and other specified tumorous and precancerous diseases shall be reported to the department pursuant to subsection (4), or reported to a cancer reporting registry if the cancer reporting registry meets standards established pursuant to subsection (4) to ensure that accuracy and completeness of the reported information. A person or facility required to report a diagnosis pursuant to subsection (4) may elect to report the diagnosis to the state through an existing cancer registry only if the registry meets minimum reporting standards established by the department. (3) The department shall maintain comprehensive records of all reports submitted pursuant to this section. These reports shall be subject to the same requirements of confidentiality as provided in section 2631 for data or records concerning medical research projects.

(4) The director shall promulgate rules which provide for all of the following:

(a) A list of tumorous and precancerous disease other than cancer to be reported pursuant to subsection (2).

(b) The quality and manner in which the cases and other information described in subsection (1) are reported to the department.

(c) The terms and conditions under which records disclosing the name and medical condition of a specific individual and kept pursuant to this section are released by the department.

(5) This section does not compel an individual to submit to medical or department examination or supervision.

(6) The department may contract for the collection and analysis of, and research related to, the epidemiologic data required under this section.

(7) Within 2 years after the effective date of this section, the department shall begin evaluating the reports collected pursuant to subsection (2). The department shall publish and make available to the public reports summarizing the information collected. The first summary report shall be published not later than 180 days after the end of the first 2 full calendar years after the effective date of this section. Subsequent annual summary reports shall be made on a full calendar year basis and published not later than 180 days after the end of each calendar year.

(8) Reporting pursuant to subsection (2) shall begin the next calendar year after the effective date of this section.

(9) This section shall take effect July 1, 1984.

This act is ordered to take immediate effect.

William A. Ryan

.....

Clerk of the House of Representatives.

William C. Kandler

.....

Secretary of the Senate.

Approved.

.....

Governor.

DEPARTMENT OF COMMUNITY HEALTH
OFFICE OF THE STATE REGISTRAR

CANCER REPORTING

Filed with the Secretary of State on April 16, 1985. These rules take effect 15 days after filing with the Secretary of State.

(By authority conferred on the department of public health by section 2619 of Act No. 368 of the Public Acts of 1978, as amended, being 333.2619 of the Michigan Compiled Laws)

R 325.9050 Registry

Rule 9050. (1) The department shall establish a registry to record cases of cancer and other specified tumorous and precancerous diseases that occur in the state. The registry shall include information concerning these cases as the department considers necessary and appropriate to conduct epidemiologic surveys of cancer and cancer-related diseases in the state.

(2) Each diagnosed case of cancer and other specified tumorous and precancerous diseases shall be reported to the department pursuant to subrule (4) of this rule, or reported to a cancer reporting registry if the cancer reporting registry meets standards established pursuant to subrule (4) of this rule to ensure the accuracy and completeness of the reported information. A person or facility required to report a diagnosis pursuant to subrule (4) of this rule may elect to report the diagnosis to the state through an existing cancer registry only if the registry meets minimum reporting standards established by the department.

(3) The department shall maintain comprehensive records of all reports submitted pursuant to this rule. These reports shall be subject to the same requirements of confidentiality as provided in section 2631 of 1978 PA 368, MCL 333.2619 for data or records concerning medical research projects.

(4) The director shall provide for all of the following:

(a) A list of tumorous and precancerous disease other than cancer to be reported pursuant to subrule (2) of this rule.

(b) The quality and manner in which the cases and other information described in subrule (1) of this rule are reported to the department.

(c) The terms and conditions under which records disclosing the name and medical condition of a specific individual and kept pursuant to this rule are released by the department.

(5) This rule does not require an individual to submit to medical or department examination or supervision.

(6) The department may contract for the collection and analysis of, and research related to, the epidemiologic data required by this rule.

(7) Within 2 years after the effective date of these rules, the department shall begin evaluating the reports collected pursuant to subrule (2) of this rule. The department shall publish and make available to the public reports summarizing the information collected. The first summary report shall be published not later than 180 days after the end of the first 2 full calendar years after the effective date of this rule. Subsequent annual summary reports shall be made on a full calendar year basis and published not later than 180 days after the end of each calendar year.

(8) Reporting pursuant to subrule (2) of this rule shall begin the next calendar year after the effective date of this rule.

History: 2004 MR 14, Eff. July 23, 2004.

R 325.9051 Definitions

Rule 9051. (1) As used in these rules:

- (a) "Primary brain-related tumor" means a primary tumor, whether malignant or benign, of the brain, meninges, spinal cord, cauda equina, a cranial nerve or nerves, or any part of the central nervous system or of the pituitary gland, pineal gland, or craniopharyngeal gland.
- (b) "Cancer" means all diagnosis with a behavior code of 2 (carcinoma in situ) or 3 (malignant primary site) as listed in the publication entitled "International Classification of Diseases for Oncology," 1976, excluding basal, epithelial, papillary, and squamous cell carcinomas of the skin, but including carcinomas of skin of the vagina, prepuce, clitoris, vulva, labia, penis, and scrotum.
- (c) "Department" means the department of community health.
- (2) The terms "clinical laboratory" and "hospital," as defined in sections 20104 and 20106, respectively, of 1978 PA 368 and MCL 333.20106 have the same meanings when used in these rules.

History: 1985 MR 4, Eff. May 2, 1985; 2004 MR 14, Eff. July 23, 2004.

R 325.9052 Reportable diagnoses

- Rule 9052. (1) Cancer diagnoses, diagnoses of benign brain-related tumors and any tumorous and precancerous diseases otherwise required to be reported by state or federal law shall be reported to the department in a manner consistent with these rules and procedures issued by the department.
- (2) Diagnoses shall be reported by all hospitals and clinical laboratories.
 - (3) A hospital or clinical laboratory may elect to report cases through a hospital or regional cancer registry that meets the rules set by the department.
 - (4) Reports shall be submitted within 180 days of a diagnosis on a form prescribed or approved by the department, except for reports forwarded on electronic media.
 - (5) Reports submitted on electronic media shall meet data quality, format, and timeliness standards prescribed by the department.

History: 1985 MR 4, Eff. May 2, 1985; 2004 MR 14, Eff. July 23, 2004.

R 325.9053 Quality assurance.

- Rule 3. (1) For the purpose of assuring the quality of submitted data, each reporting entity shall allow the department to inspect such parts of a patient's medical records as are necessary to verify the accuracy of submitted data.
- (2) A reporting entity which meets the standards of quality and completeness set by the department shall be subject to inspection not more than once every 2 years for the purpose of assessing the quality and completeness of reporting from the entity.
 - (3) A reporting entity shall, upon request of the department, supply missing information, if known, or clarify information submitted to the department.
 - (4) Upon mutual agreement between a reporting entity and the department, the reporting entity may elect to submit copies of medical records instead of inspection. Each copy of a medical record or part thereof submitted to the department pursuant to this rule shall be used only for verification of corresponding reported data, shall not be recopied by the department, and shall be kept in a locked file cabinet when not being used. Such copies shall be destroyed promptly following verification of the corresponding reported data or, if the reported data appears to be inaccurate, following clarification or correction of the reported data.
 - (5) Both of the following provisions shall be complied with to preserve the confidentiality of each patient's medical records:
 - (a) Each reporting entity shall provide to the department, for inspection only, all of the following records and reports:
 - (i) Reports of tissue analyses which have been performed for the purpose of determining the presence or absence of malignant disease.

- (ii) Reports of radiological examinations performed for the purpose of determining the presence or absence of malignant disease.
- (iii) Reports of diagnoses of malignant disease and notations of the reasons for such diagnoses, including both the primary clinician's reports and consultation reports.
- (iv) Those parts of medical records which contain the specific information required to be reported.
- (b) A reporting entity shall not be required by this rule to allow inspection of any part of any patient's medical record other than those parts listed in subrule (3) of this rule. A reporting entity may allow the inspection of medical records from which parts, other than those specified, have been deleted, masked, crossed out, or otherwise rendered illegible.

History: 1985 MR 4, Eff. May 2, 1985.

R 325.9054 Confidentiality of reports.

Rule 4. (1) The department shall maintain the confidentiality of all reports of cancer submitted to the department and shall not release such reports, or any information which, because of name, identifying number, mark, or description, can be readily associated with a particular individual, except in accordance with subrules (2), (3), (4), and (5) of this rule. The department shall not release any information that would indicate whether or not the name of a particular person is listed in the cancer registry, except in accordance with subrules (2), (3), (4), and (5) of this rule.

(2) A report of cancer submitted to the department concerning a particular individual, and any other information maintained in the cancer reporting system which, because of name, identifying number, mark, or description, can be readily associated with a particular individual, shall be released as follows:

(a) To the particular individual upon compliance with both of the following provisions:

(i) Receipt of a written request which is signed by the particular individual and which is witnessed or notarized as required by subrule (3) of this rule.

(ii) Presentation by the particular individual of suitable identification as required by subrule (4) of this rule.

(b) If the particular individual is a minor, to a parent of the particular individual upon compliance with all of the following provisions:

(i) Receipt of a written request which is signed by the parent and which is witnessed or notarized as required by subrule (3) of this rule.

(ii) Receipt of a certified copy of the birth certificate of the particular individual.

(iii) Presentation by the parent of suitable identification as required by subrule (4) of this rule.

(c) If the particular individual has a court-appointed guardian or if the particular individual is deceased, to the court-appointed guardian or to the executor or administrator of the particular individual's estate upon compliance with all the following provisions:

(i) Receipt of a written request which is signed by the court-appointed guardian, executor, or administrator and which is witnessed or notarized as required by subrule (3) of this rule.

(ii) Receipt of a certified copy of the order or decree which appoints the guardian, executor, or administrator.

(iii) Presentation by the guardian, executor, or administrator of suitable identification as required by subrule (4) of this rule.

(d) To an attorney or other person designated by the particular individual upon compliance with both of the following provisions:

(i) Receipt of a written request which is signed by the particular individual, which is witnessed or notarized as required by subrule (3) of this rule, and which requests release of the information to the attorney or other person.

(ii) Presentation by the attorney or other person of suitable identification as required by subrule (4) of this rule.

(e) To an attorney or other person designated by the court-appointed guardian of the particular individual or designated by the executor or administrator of the estate of the particular individual upon compliance with all of the following provisions:

(i) Receipt of a written request which is signed by the court-appointed guardian, executor, or administrator, which is witnessed or notarized as required by subrule (3) of this rule, and which requests release of the information to the attorney or other person.

(ii) Receipt of a certified copy of the order or decree which appoints the guardian, executor, or administrator.

(iii) Presentation by the attorney or other person of suitable identification as required by subrule (4) of this rule.

(f) If the particular individual is a minor, to an attorney or other person designated by the parent of the particular individual upon compliance with all of the following provisions:

(i) Receipt of a written request which is signed by the parent, which is witnessed or notarized as required by subrule (3) of this rule, and which requests release of the information to the attorney or other person.

(ii) Receipt of a certified copy of the birth certificate of the particular individual.

(iii) Presentation by the attorney or other person of suitable identification as required by subrule (4) of this rule.

(3) Every written request for the release of information submitted pursuant to subrule (2) of this rule shall be signed by the person making the written request. Such signature shall comply with either of the following provisions:

(a) Be witnessed by an employee of the department who has been designated to witness such requests and to whom the person making the request presents suitable identification as required by subrule (4) of this rule.

(b) Be notarized by a notary public or magistrate.

(4) Any person who is required by subrule (2) or (3) of this rule to present suitable identification shall present an identification document, such as a driver's license, or other document which contains both a picture of the person and the signature or mark of the person.

(5) The director of the department may, pursuant to R 325.9055, release information from the cancer reporting system to an authorized representative of a study or research project reviewed by the scientific advisory panel and approved by the director. The department shall not release any part of a patient's medical record obtained pursuant to R 325.9053.

History: 1985 MR 4, Eff. May 2, 1985.

R 325.9055 Scientific advisory panel; release of information for research.

Rule 5. (1) The director of the department shall appoint a scientific advisory panel of not less than 3 scientists to review research proposals whereby a release of information maintained by the department which identifies an individual reported to have a diagnosis of cancer is required.

(2) All research proposals which require the release of information that identifies individuals with reported diagnoses of cancer shall be reviewed by the scientific advisory panel.

(3) The panel shall, in writing, advise the director concerning the merits of the study.

(4) The release of information for research which identifies individuals with reported diagnoses of cancer shall be subject to the terms and conditions set by the department. Such study or research project shall not publish the name of any individual who is or was the subject of a report of cancer submitted to the department, and such study or research project shall not release any identifying number, mark, or description which can be readily associated with an individual who is or was the subject of a report of cancer submitted to the department.

(5) A reporting entity shall, upon notification that the director has approved a research project, provide to the department or a researcher named by the director the name of the primary physician responsible for the medical care of persons selected for the research study as indicated in the reporting entity's records.

History: 1985 MR 4, Eff. May 2, 1985.

R 325.9056 Exchange of records.

Rule 6. The department, by agreement, may transmit transcripts or copies of reports of cancer diagnoses to state or national cancer registries when the reports relate to residents of other states or countries. The agreement shall require that the transcripts or records be used for statistical purposes only as specified in the agreement and that the identity of a person subject to the report shall not be released.

History: 1985 MR 4, Eff. May 2, 1985.

R 325.9057 Adoption by reference.

Rule 7. The publication entitled "International Classifications of Diseases for Oncology," 1976, specified in R 325.9051 is adopted by reference in these rules. Copies of the adopted matter may be obtained from the World Health Organization Publications Center, U.S.A., 49 Sheridan Avenue, Albany, NY 12210, or from the Department of Public Health, Box 30035, 3500 N. Martin Luther King, Jr. Blvd., Lansing, Michigan 48909. At the time of adoption of these rules the cost per copy is \$10.00.

History: 1985 MR 4, Eff. May 2, 1985.

R 325.971 Reporting of cancer.

Rule 1. (1) On and after May 1, 1947, every physician, dentists, hospital superintendent, and clinic director who has knowledge of a case of cancer shall, within 10 days, report the same to the Michigan department of health on a form provided by said department. The report shall contain the name and address of the patient and either the name and address of the physician, or of the dentist, or of the hospital superintendent and hospital, or of the clinic director and clinic, and such other data as may be required.

(2) All such reports and records of the Michigan department of health pertaining to cancer are hereby declared to be confidential.

History: 1944 ACS 10. p. 16: 1954 AC. P. 2317.

Editor's note: This rule appears in the Michigan Administrative code of 1954 as R 325.975.

REPORTING FACILITY RESPONSIBILITIES

A. Michigan Hospitals and Laboratories

1. Know the Michigan Cancer Surveillance Program rules for reporting.
2. Select a reporting option; whether on paper or electronic and establish a schedule for reporting (quarterly submissions are preferred). Notify the Michigan Cancer Surveillance Program of any changes in the method of reporting.
3. Perform all case finding activities to ensure completeness of reporting.
4. Information on reportable cases MUST be submitted to the Michigan Cancer Surveillance Program within six months or 180 days from the initial date of diagnosis. If there is a reporting problem please notify the Michigan Cancer Surveillance Program.
5. Inform the Michigan Cancer Surveillance Program of any changes in the contact person at your facility.
6. Facilities will be involved in periodic quality control visits by a quality improvement field representative from the Michigan Cancer Surveillance Program. These reporting facilities will be requested to do the following:
 - provide access to medical records as requested for quality review;
 - submit master disease index as requested for complete casefinding;
 - provide adequate work space for field representative;
 - provide access to pathology, radiation, and chemotherapy records for complete casefinding;
 - be available for consultation in quality control reviews.
7. Maintain some type of accession log or master file of submissions which will serve as a quick reference of all cases sent to the Michigan Cancer Surveillance Program. This may be as simple as keeping copies of the cancer report forms or maintaining a reporting log which includes name, primary site, date of diagnosis, and date case was sent to the state.
8. Download and print the following manuals to use when completing the cancer report form:

Collaborative Staging and Coding Manual at <http://www.cancerstaging.org/cstage/manuals.html>

Multiple Primary and Histology Coding Rules at <http://seer.cancer.gov/tools/mphrules/>

SEER Summary Staging Manual at <http://seer.cancer.gov/tools/ssm/> AND
Staging Manual corrections http://seer.cancer.gov/tools/ssm/errata_08202002.pdf

Definitions of Single and Subsequent Primaries for Hematologic Malignancies at
http://seer.cancer.gov/icd-o-3/hematopoietic_primaries.d03152001.pdf

Site/Histology Validation List at www.seer.cancer.gov/icd-o-3/

9. Purchase the International Classification of Disease Oncology, Third Edition (ICD-O-3) from World Health Organization's North American distributor, WHO Publications Center USA, 49 Sheridan Avenue, Albany, NY 12210. WHO has set the price for single copies of ICD-O-3 at \$54.00.

For ICD-O-3 errata and clarifications go to:

<http://www.who.int/classifications/icd/updates/ICD-O-3-errata.d05222001.pdf>

AND

<http://www.who.int/classifications/icd/updates/ICD-O-3-errata.d05062003.pdf>

B. Responsibilities of the Michigan Cancer Surveillance Program

1. Provide to all reporting facilities all cancer report forms.
2. Provide training and ability to locate reference materials through the world wide web and agencies.
3. Perform all computer data entry of manually submitted reports and process patient data updates.
4. Conduct procedures to un-duplicate the cancer patient file, to edit the file following accepted cancer editing standards and to clarify and resolve issues relative to data quality that are encountered.
5. Provide specific reports to verify data submission as requested by the reporting facility.
6. Release a statistical report, Cancer Incidence and Mortality, annually and have available on the web at www.michigan.gov/mdch, (click on Statistics and Reports, then on Cancer Statistics to see the report).

PREPARATION OF THE CANCER REPORT FORMS

Whenever a cancer case is diagnosed or first treated within a hospital or laboratory, a report of the case must be prepared and forwarded to the state. The report must be sent within 180 days or six months from the initial date of diagnosis or initial treatment. The form to use in reporting a cancer case is the Cancer Report DCH-0768 (formerly B-300). Proper completion of this form is an important ingredient to the development of a cancer registry for the state. These instructions are intended to outline what information is needed and to provide specific guidance for completing the form. Should the instructions need clarification or if special problems exist which make reporting as outlined difficult, do not hesitate to contact the office to discuss the matter.

Specific instructions for identifying cases, determining primary site, assigning histology and stage is discussed in great detail in sections to follow.

REPORTING INSTRUCTIONS

Upon reaching a diagnosis of an in situ or invasive cancer or providing treatment for a patient diagnosed elsewhere, a hospital or laboratory is to report the case. In addition, any tumor diagnosed October 1, 2004 or later with a behavior code of '0' or '1' for the following site codes: meninges (C70.0 – C70.9); brain (C71.0 – C71.9); spinal cord, cranial nerves, and other parts of the central nervous system (C72.0 – C72.9); pituitary gland (C75.1); craniopharyngeal duct (C75.2); and pineal gland (C75.3) must be reported. *The report must be on a form provided or approved by the department and submitted within 180 days or six months from the initial date of diagnosis.* Upon approval, these reports may be submitted through an automated cancer registry on a mutually agreeable schedule. Generally, each primary cancer which is diagnosed or treated within a hospital or laboratory should be reported to the office on a separate cancer report form. The diagnosis and/or treatment of a patient for a primary tumor that was previously reported by the facility need not be reported a second time. Revisions and corrections to previously submitted information is important, however. New primary tumors diagnosed in previously reported patients are reportable. (See Reporting of Multiple Primary Tumors)

As reports are received by the department, they will be reviewed, queried, electronically recorded and edited. In the course of assembling the data into a registry, duplicate reports of primary tumor diagnoses will be identified and tagged. The resultant file can thereby be utilized to develop accurate incidence information. There will be no active follow-up on the status or treatment of reported cases. Rather, a tumor incidence registry is intended. Only follow-up for quality control and specific research projects will occur.

The use of acceptable case finding and record abstracting procedures are essential to complete reporting. The basic elements of reporting are good case finding, the proper identification of cases that are reportable, proper preparation of reports, and prompt submission of the reports.

Because the state maintains an incidence registry only, the information required for the state cancer report is limited when compared to a typical hospital cancer registry. The reporting of annual follow-up

information on the status of a case is not necessary. However, if the patient becomes deceased, the vital status must be reported. What are required are basic items of information which identify and describe the patient and which relate to the reportable conditions that have been diagnosed for that patient. Information on the types of therapy provided as the first course of therapy is also required. The instructions which follow are organized to correspond with the order of the items on the cancer report form.

The cancer report form may be completed by typing or printing. The form may also be photocopied when your supply is low. Be sure to maintain legibility when making copies.

During internal quality control reviews, the following essential data items are the most common problem areas and are routinely queried for clarification.

Patient's first name	blank, inconsistent, unknown or illegible
Patient's last name	blank, unknown or illegible
Complete address	blank, illegible or inconsistent
Sex	blank, inconsistent with name or site
Date of Birth	blank, inconsistent with site, report date, or date of diagnosis
Social Security Number	blank
Primary site	blank or inconsistent with histology
Laterality	blank and a paired organ is reported for the primary site
Histology	blank, if inconsistent with the primary site or if it indicates the condition may not be reportable
Stage	inconsistent with histology, blank, or invalid values based upon specific staging system
Method of diagnosis	blank or inconsistent as in an in situ diagnosis not based upon a microscopic method of diagnosis
Treatment	blank and the report is from a hospital with a treatment center

If the reporting facility cannot supply the needed data items requested, the next step is to query the attending physician. For such cases, the complete name and office address of the physician is requested.

For independent laboratories that do not have access to necessary patient demographic information to complete the report, adding the name and office address of the doctor to the report is extremely helpful. This reference information on the physician should be added to the bottom of the cancer report form for any case with missing information. Be sure to supply the doctor's full name and complete mailing address.

Manual Submission

Cases submitted manually, must use the current revision DCH-0768 (Rev. 5/07) and ***submitted within 180 days of the diagnosis.***

The cancer report form is also available in Word and an Adobe Acrobat PDF file. This electronic copy of the cancer report form may be used in lieu of the actual paper form which is supplied by the MCSP office. For an electronic copy of the cancer report form, please contact staff at the MCSP office or visit www.michigan.gov/mdch; clicking providers, departmental forms, cancer reporting forms. The form can be saved onto your hard drive or a diskette.
A report for each separate primary tumor is required.

Additional reports for subsequent re-diagnosis or additional treatments of a previously reported condition are NOT required.

Mail completed cancer report forms to:

Michigan Cancer Surveillance Program
Vital Records & Health Data Development Section
P.O. Box 30691
Lansing, MI 48909
Attention: Elaine Snyder

Electronic Submission:

Cases submitted electronically are encouraged to be submitted in the most recent version of the data exchange format and code structures as specified by the North American Association of Central Cancer Registries (NAACCR). NAACCR Version 11 Reporting Format begins with 2007 diagnoses.

Facilities having tumor registries that utilize computer software may elect to submit cancer reports electronically. A diskette, CD or FTP site may be used to transmit reports to the Michigan Cancer Surveillance Program. This section covers information needed by a reporting facility that wishes to submit cancer reports through electronic/automated methods. Hospitals with tumor registries are the most likely candidates to elect this method of transmission. Hospitals may choose from a variety of commercially available software and varying modes of data transmission. Tumor registries electing to use commercially available software have a choice of tumor registry programs from which to select. These software programs are usually amenable to easy transmission of data to the Michigan Cancer Surveillance Program.

These software programs include:

IMPAC
IMPATH
OncoLog

Effective July 1, 2007, the MCSP will expect those facilities with 100 cases or more a year, to have Abstract Plus (abstracting software provided free of charge by the MCSP) installed. High volume facilities will no longer be permitted to submit their cases on paper.

Please let us know when you purchase a commercial software package so that we can be prepared to help you send data to us in the most efficient manner possible.

Mail diskettes to:

Michigan Cancer Surveillance Program

Vital Records & Health Data Development Section
P.O. Box 30691
Lansing, MI 48909
Attention: Wendy Stinnett

Submitting Corrections

If a cancer case is reported, and later determined *not* to be reportable, *OR* the information to resolve an unknown variable has been obtained *OR* the information for a particular variable was later determined to be submitted incorrectly, a correction to the previously submitted report **MUST** be forwarded. It is especially important to send corrections when there are changes in the date of diagnosis, primary site, histology, tumor grade, stage, etc. To submit a correction, please conduct the following:

Manual Submission

1. Copy the **original** cancer report form that was submitted.
2. Draw a line through the INCORRECT information.
3. Pencil in and **HIGHLIGHT** the corrected information.
4. Check UPDATE on the bottom half of the form
5. Mail corrected case(s) to Elaine Snyder (see address above.)

Electronic Submission

1. Use NAACCR field 10 Record Type, to identify that an UPDATE or CORRECTION has been made.
2. Record a "M" to indicate that the record has been modified and previously submitted to the central registry.
3. Submit the corrected case(s) on a diskette.
4. Mail diskettes to Wendy Stinnett (see address above.)

OR

1. Use NAACCR field 2220 State/Requestor Items, to identify that the record contains corrected information.
2. Record a "2" as the first value in the field to indicate an UPDATE or CORRECTION has taken place.
3. Submit the corrected case(s) on a diskette.
4. Mail diskettes to Wendy Stinnett (see address above.)

NOTE: Do NOT use the NAACCR Update /Correction Layout Version 2.0 to submit corrections.

OR

Print the abstract that coincides with the patient's corrected information.

HIGHLIGHT the corrected information.

Indicate the original date the case was submitted.

Mail abstract to Elaine Snyder (see address above.)

Supporting Text Documentation

Text may be needed to justify the codes selected for the data items and to allow recording information that is not coded at all. It is a component of a complete electronic abstract, and allows for the full abstract to be printed or reviewed on the screen as needed. In addition, the text is used for quality control and special studies. As the purpose of text information is to provide the opportunity for documenting and

checking coded values, information documenting the disease process should be entered from the medical record and should not be generated electronically from coded values.

Example: The patient is diagnosed with a malignancy in which the primary site and histology do not agree with the ICD-O-3 SEER Site/Histology Validation List. According to the pathologist and managing physician, the diagnosis is correct. Document in the text field that the diagnosis has been reviewed and is indeed accurate.

Reporting Requirements by Item and Facility Type - 2006

Specific reporting requirements for hospitals operating a cancer registry, hospitals with no cancer registry and independent laboratories are summarized in the table below. The need to report an item has been assigned to the levels of required, reportable, report if available and not required. These requirements are patterned after the ACoS levels for inclusion of information within a hospital registry. The practical definitions of these levels of reportability are best termed as levels of effort associated with collecting and providing the information:

[REQ] Required	The facility must collect and report the information with data collection efforts including review of the patient's hospital charts, outpatient records or other available records, as well as making inquiries with other facilities or the physician of record as is necessary to obtain the information.
[REP] Reportable	The facility must report the information if it can be located within the patient's chart, outpatient records or other available records, but need not make inquiries of other facilities or physician's offices.
[RIA] Report if Available	Should be reported if the information is within the facility data base or otherwise readily available for reporting
[N/R] Not Required	Item considered generally not available to the facility and/or not considered as reliably available. Information may be reported if available to the facility.

When two facilities with different reporting requirement levels coordinate reporting responsibilities, the requirements for reporting are determined by the facility with the highest reporting level. For example, should a laboratory and a hospital with a registry agree to share reporting responsibilities, the reporting requirement to meet would be of a 'hospital with a registry.'

Once you have determined your facility type, use the table on the following pages to determine the level of reporting requirement for each data item. The definitions for the three facility types are as follows:

1. Hospital with a Registry - an entity that has an approved cancer program by the American College of Surgeons (ACoS) or *working* towards ACoS approval *or* a regional registry that houses data for surrounding facilities.
2. Hospital without a Registry - geared towards smaller entities that do not have an approved cancer program *or* have limited resources to diagnosis and treat cancer patients.

3. Independent Laboratories - a separate laboratory from a hospital that reads specimens for either a hospital or physician's office.

For those facilities designated as a 'Hospital with a Registry,' the data item Class of Case will further define the facility type and those data items that are required. The following guidelines apply:

1. Class of Case 0, 1, 2 & 6 - complete the data items as required for a 'Hospital with a Registry.'
2. Class of Case 3, 4, 5, 8 & 9 - complete the data items for a 'Hospital without a Registry'
3. Class of Case 7 - complete the data items for an 'Independent Laboratory.'

<i>Item Number</i>	<i>Item Name</i>	<i>Hospital with Registry</i>	<i>Hosp w/o Registry</i>	<i>Independent Laboratory</i>
1a-c	Name of Patient	REQ	REQ	REQ
2	Name Before First Married	REP	REP	N/R
3	Alias Name	REP	REP	N/R
4	Social Security Number	REQ	REQ	REQ
5a-d	Address of Patient at Diagnosis	REQ	REQ	REQ
6	Supplemental Address	REQ	REQ	REQ
7	County at Diagnosis	REQ	REQ	REQ
8	Date of Birth	REQ	REQ	REQ
9	Birthplace	RIA	RIA	RIA
10	Sex	REQ	REQ	REQ
11	Race	REQ	REQ	REQ
12	Hispanic Origin	REQ	REQ	N/R
13	Marital Status	RIA	RIA	N/R
14a	Occupation	RIA	RIA	N/R
14b	Industry	RIA	RIA	N/R
15	Tobacco Use	REP	REP	N/R

<i>Item Number</i>	<i>Item Name</i>	<i>Hospital with Registry</i>	<i>Hosp w/o Registry</i>	<i>Independent Laboratory</i>
16	Alcohol Use	REP	REP	N/R
17	Co-morbidities (ICD-9-CM Codes)	REQ	REQ	N/R
18a-c	Family History of Cancer	REP	REP	REP
19	Accession Number and Sequence Number	REQ	RIA	RIA
20	Class of Case	REQ	RIA	N/R
21	Medical Record Number	REP	REQ	RIA
22	Laboratory Record Number	RIA	RIA	REQ
23	Case Finding Source	RIA	RIA	RIA
24a	Primary Anatomical Site	REQ	REQ	REQ
24b	Paired Organ	REQ	REQ	REQ
25a	Clinical/Histological Diagnosis	REQ	REQ	REQ
25b	Tumor Grade	REQ	REQ	REQ
26	Date of Hospital Admission	REP	REP	N/R
27	Date of Hospital Discharge	REP	REP	N/R
28	Date of Initial Diagnosis	REQ	REQ	REQ
29	Method of Diagnosis	REQ	REQ	REQ
30	EOD Tumor Size (mm) ACoS Only	REQ	RIA	N/R
31	General Summary Stage	REQ	REQ	REQ
32	AJCC Stage	REQ	RIA	N/R
33	CS Tumor Size (mm)	REQ	REQ	REQ
34	CS Extension	REQ	REQ	N/R
35	CS Tumor Size/Extension Evaluation	REQ	REQ	N/R
36	CS Lymph Nodes	REQ	REQ	N/R
37	CS Regional Nodes Evaluation	REQ	REQ	N/R
38	CS Regional Lymph Nodes Positive	REQ	REQ	N/R
39	CS Regional Lymph Nodes Examined	REQ	REQ	N/R
40	CS Mets at Diagnosis	REQ	REQ	N/R

<i>Item Number</i>	<i>Item Name</i>	<i>Hospital with Registry</i>	<i>Hosp w/o Registry</i>	<i>Independent Laboratory</i>
41	CS Mets Evaluated	REQ	REQ	N/R
42	CS Site Specific Factor 1	REQ	REQ	N/R
43	CS Site Specific Factor 2	REQ	REQ	N/R
44	CS Site Specific Factor 3	REQ	REQ	N/R
45	CS Site Specific Factor 4	REQ	REQ	N/R
46	CS Site Specific Factor 5	REQ	REQ	N/R
47	CS Site Specific Factor 6	REQ	REQ	N/R
48	Date First Therapy Initiated	REQ	REP	N/R
49	Reason No Surgery	REQ	REP	N/R
50	First Course of Cancer Directed Therapy	REQ	REP	N/R
51	Vital Status	REQ	RIA	N/R
52a	If Deceased, State of Death	REQ	RIA	N/R
52b	If Deceased, Date of Death	REQ	RIA	N/R
53	Facility	REQ	REQ	REQ
54	Date Abstracted	REQ	REQ	REQ
55	Abstractor Name	REQ	REQ	REQ
56	Abstractor Phone Number	REQ	REQ	REQ

Specific Instructions for Completing Each Item on the Cancer Report Form

In describing the proper reporting of cancer patient information, reference will frequently be made to standard reference sources. These reference sources are abbreviated within the instructions as follows:

SEER	Surveillance, Epidemiology and End Results
COC	Commission on Cancer within the American College of Surgeons
ACoS	American College of Surgeons
FORDS	<i>Facility Oncology Registry Data Standards</i> manual produced by the COC
NAACCR	North American Association of Central Cancer Registries
AJCC	American Joint Committee on Cancer
ICD-O-3	<i>International Classification of Diseases for Oncology, Third Edition</i>

Item 1. Name of Patient

Enter the legal name of the patient.

Do not abbreviate.

If an alternate name or a maiden name is known, enter that name and identify whether it is an alias or maiden name as is appropriate; entering in Items 2 and 3 respectively.

If only an initial is available for the middle name, enter the initial.

If the name is unknown, as in the case of an unidentified body diagnosed at an autopsy, enter "unknown."

Do not leave this item blank.

Item 2. Name Before First Married

Leave this item blank if it is not appropriate for the patient being reported, is not available in the records, or when not reporting this item.

Item 3. Alias Name

Enter an alternate name or AKA (also known as) used by the patient, if known.

Item 4. Social Security Number

Enter the social security number of the patient. If the patient does not have a social security number, enter “none.”

If this number cannot be ascertained, enter “999-99-9999.”

Do not leave this item blank.

Item 5a. Address of Patient at Diagnosis: Number and Street

Enter the street address of the patient’s usual residence at the *initial time of diagnosis*. The address does NOT change if the patient moves.

If the patient has more than one primary tumor, the address at diagnosis may be different for each primary.

If a rural route number or post office box is given, this can be recorded, but ONLY if the street and numbers are NOT available. In abbreviating street and place names, use standard U.S. Postal abbreviations.

If the address is unknown, enter “unknown.”

Do not leave this item blank.

Item 5b. City at Diagnosis

Enter the postal city or village of the patient’s address.

If the city is unknown, enter “unknown.”

Do not leave this item blank.

Item 5c. State at Diagnosis

Enter the state of residence for the patient, or if not a resident of the United States, the country of residence. If the city is unknown, enter “unknown.”

NOTE: Reports on Michigan residents, as well as nonresidents are necessary.

Do not leave this item blank.

Item 5d. Zip Code at Diagnosis

Record the patient's five or nine digit zip code.

If the zip code is unknown, enter "unknown."

Do not leave this item blank.

Item 6. Supplemental Address

Record the name of a place or facility (i.e. nursing home, name of an apartment complex) if applicable.

Item 7. County at Diagnosis

Enter the name of the county where the patient resided at the time of the initial diagnosis for this primary.

If the county is not obtainable, enter "unknown."

Do not leave this item blank.

Item 8. Date of Birth

Enter the exact date of the patient's birth. If only a partial date is known, enter the partial date using 9's when appropriate (99/99/9999). It is preferred that the date be entered as month, day and year (mm/dd/yyyy).

If a date of birth is unknown, but an age at the time of diagnosis is available, enter the patient's age.

Do not leave this item blank.

Item 9. Birth Place - State or Country

Report the state or country of the patient's birth. Report the state if born in the USA; otherwise, report the country.

If the information is not available in the patient's record, leave the item blank.

Item 10. Sex

Record the sex of the patient by entering the number in the space provided which corresponds to the patient's sex.

The codes are as follows:

- 1 = Male
- 2 = Female
- 3 = Other (hermaphrodite)
- 4 = Transsexual
- 9 = Not Stated

Do not leave this item blank.

Item 11. Race

Enter the patient's race according to the documentation in the medical record.

If multi-racial, enter each race according to the documentation in the patient's chart, for a total of five races.

In general, race should be reported as American Indian, white, black, etc.

White includes Mexican, Puerto Rican, Cuban, and all other Caucasians.

If Asian, enter the national origin as Chinese, Vietnamese, Japanese, Hmong, etc.

Race is a required data item for all facilities regardless of the facility type. If the patient's race is not available in the medical record, it may be necessary to contact the physician's office.

For manual submission, the codes are not necessarily required, but have been provided to assist with identifying the appropriate race.

The codes are as follows:

- 1 = White
- 2 = Black
- 3 = American Indian
- 4 = Chinese
- 5 = Japanese

6 = Filipino
7 = Hawaiian
8 = Korean
9 = Asian Indian, Pakistani
10 = Vietnamese
11 = Laotian
12 = Hmong
13 = Kampuchean
14 = Thai
20 = Micronesian
21 = Chamorroan
22 = Guamanian, NOS
25 = Polynesian
26 = Tahitian
27 = Samoan
28 = Tongan
30 = Melanesian
31 = Fiji Islander
32 = New Guinean
90 = Multiracial
96 = Other Asian, including Asian NOS and Oriental NOS
97 = Pacific Islander, NOS
98 = Other
99 = Unknown

Do not leave this item blank.

Item 12. Hispanic Origin

Indicate whether the patient is of Hispanic origin, by entering the number which corresponds to their status, as is indicated on the form.

The codes are as follows:

0 = Non-Spanish, Non-Hispanic
1 = Mexican (includes Chicano)
2 = Puerto Rican
3 = Cuban
4 = South or Central American (except Brazil)
5 = Other Spanish (includes European)
6 = Spanish, NOS; Hispanic, NOS (Based upon evidence other than surname or maiden name that the person is Hispanic, but it cannot be assigned to any of the categories above.)
7 = Spanish surname only

9 = Unknown whether Spanish or not

Independent laboratories are not expected to report this item and may leave the item blank, otherwise **do not leave this item blank.**

Item 13. Marital Status

Enter the marital status of the patient at the initial time of diagnosis.

The codes are as follows:

- 1 = Single (never married)
- 2 = Married
- 3 = Separated
- 4 = Divorced
- 5 = Widowed
- 9 = Unknown

Do not leave this item blank.

Item 14a. Occupation

Enter the usual occupation of the patient. "Usual Occupation" is the kind of work the patient did during most of his/her working life. Ie: claim adjuster, farm hand, coal miner, janitor, store manager, research chemist, civil engineer, college professor, teacher, etc.

Enter "student" if the patient was a student at the time of diagnosis and was never regularly employed.

This data item applies only to patient's who are 14 years of age or older at the time of diagnosis.

Do not use "retired." If the patient has retired from his or her usual occupation, the "usual occupation and business/industry" of the patient must be specified.

If the patient was never employed enter "never employed."

If the usual occupation of the patient is unknown, enter "unknown."

If the patient was a homemaker at the time of diagnosis, but had worked outside the household during his or her working life, enter that occupation.

If the patient was a homemaker during most of his or her working life, and never worked outside the household, enter "homemaker."

"Self-employed" by itself is incomplete. The kind of work must be determined. The entry for business/industry should include both the proper business/industry and the entry "self-employed."

Avoid entering the job types below without further information. Attempt to quantify them further, i.e., for broker, specify stockbroker, real estate broker or livestock broker.

Accounting	Equipment operator	Program specialist
Accounting work	Factory worker	Programmer
Adjuster	Farm worker	Ranch worker

Agent	Fireman	Research
Analyst	Foreman	Sales
Broker	Heavy equip operator	Scientist
Caretaker or custodian	Helper	Shipping
Claims adjuster	Investigator	Supervisor
Clerk	Laborer	Sys analyst
Consultant	Layout worker	Teacher
Contractor	Maintenance worker	Technician
Counselor	Mechanic	Tester
Data processing	Nurse	Trucker
Doctor	Office clerk	Works in
Engineer	Office worker	office, etc.
Entertainer	Office work	

Item 14b. Industry

Code the patient's industry based upon their usual occupation.

Enter the kind of business or industry to which the occupation in Item 14a was related, such as insurance, automobile, government, school, church, etc.

DO NOT enter organization or firm names.

If the patient was never employed, enter "never employed."

If this information is unknown, enter "unknown."

Agency	Laundry
Aircraft components	Lumber company
Aircraft parts	Manufacturer's agent
Auto or automobile components	Mine
Auto or automobile parts	Nylon factory
Bakery	Office
Box factory	Oil industry
Coal company	Plastics factory
County or county government	Public utility
Credit company	Railroad car shop
City or city government	Packing house
Club, private	Pipeline
Dairy	Repair shop
Discount house	Research
Discount store	School
Electrical parts manufacturing	Tailor shop
Engineering company	Terminal
Express company	Textile mill
Factory, mill, or plant	Transportation company
Foundry	Water company
Freight company	Well
Fur company	

Item 15. Tobacco Use

Enter whether or not the patient has a history of tobacco use.

eg: current use, prior use or never used

for: cigarettes, pipe, snuff, chew

If the patient quit smoking one year or less from the initial date of diagnosis, indicate “current use.”

If unknown, leave **BLANK**.

Item 16. Alcohol Use

Enter whether or not the patient has a history of alcohol use.

eg: current use, prior use, or never used

If unknown, leave **BLANK**.

Item 17. Co-morbidities (ICD-9-CM codes)

Co-morbidities are pre-existing medical conditions or conditions that were present at the time the patient was diagnosed with this cancer (e.g. chronic conditions such as COPD, diabetes, and hypertension).

Enter the patient’s pre-existing medical conditions during the patient’s hospital stay for the treatment of this cancer using ICD-9-CM codes.

The following codes are reportable co-morbidities:

001–139.8

240–999.9

E870–E879.9

E930–E949.9

V07.2–V07.39

V10–V15.9

V22.2–V23.1

V25.4

V44–V45.89

V50.41–V50.49

Do NOT review the medical record and assign codes to these conditions; you can only record the above conditions if they have been identified by the medical records coder and appear on the face sheet.

Co-morbid conditions are identified by ICD-9-CM codes **001–139.8 and 240–999.9**.

Complications are conditions that occur during the hospital stay, while the patient is being treated for the cancer (e.g. postoperative urinary tract infection or pneumonia). Complications may also occur following the completion of therapy and be a cause for readmission to the

hospital. Complications are identified by the ICD-9-CM “E” codes which classify environmental events, circumstances, and conditions as the cause of injury, poisoning, and other adverse effects.

Only “E” codes that describe adverse effects occurring during medical care are collected in this data item. They are represented by ICD-9-CM codes **E870–E879.9** (misadventures to patients during surgical and medical care) and **E930–E949.9** (drugs and medicinal and biologic substances causing adverse effects in therapeutic use).

Factors influencing the health status of patients are circumstances or problems that are not themselves a current illness or injury and are identified by the ICD-9-CM “V” codes (e.g. women receiving post menopausal hormone replacement therapy, or a history of malignant neoplasm).

Only specific “V” codes which describe health characteristics are collected in this data item. They are represented by ICD-9-CM codes **V07.2–V07.39** (prophylactic measures), **V10–V15.9** (personal health history), **V22.2–V23.1** (pregnancy), **V25.4** (contraception), **V44–V45.89** (artificial opening and other post surgical states), **V50.41–V50.49** (prophylactic organ removal).

NOTE: Look on the face sheet for the above codes in bold; record the codes on the cancer report form.

Item 18a. Family History of Cancer

Enter whether or not the patient has a family history of cancer.

If unknown, leave **BLANK**.

Item 18b. Immediate Family Member

Enter whether or not the patient in Item 18a is an immediate family member.
eg: parent, sibling, child

If unknown, leave **BLANK**.

Item 18c. Same Anatomical Site

Enter whether or not the individual in Item 18b has the same type of cancer as the patient.

If unknown, leave **BLANK**.

Item 19. Accession and Sequence Number

The accession number is ONLY for ‘hospitals with a registry,’ in which case, the number would be assigned as the patient is enrolled into the system.

The accession and sequence number is a six-digit number.

The first two digits of the accession number specify the year in which the patient was first

seen at the reporting institution for the diagnosis and/or treatment of cancer.
The last four digits of the accession number, is the numeric order in which the registrar entered the case into the registry.

Numeric gaps in accession numbers are allowed.

If a case is deleted from your database, do NOT reuse the accession number for another case. The sequence number uniquely identifies the primary as either a single primary, secondary primary and so on, within the data set for a given registry.

If not reporting, leave this item blank.

Item 20. Class of Case

This field is ONLY required for 'hospitals with a registry'. If not reporting, leave item blank.

Enter the appropriate numeric class of case code in the box provided. The numeric values for class of case are those required by the Commission on Cancer (COC) found in the FORDS Manual, Volume II, pages 5-6.

The codes are as follows:

- 0 = First diagnosed at the reporting institution since the reference date of the registry and all first course of treatment elsewhere.
- 1 = First diagnosed and all or part of the first course of treatment at the reporting institution.
- 2 = First diagnosed elsewhere and treatment plan developed and documented and/or the first course of treatment given at the reporting institution after the registry's reference date.
- 3 = First diagnosed and all of the first course of treatment elsewhere.
- 4 = First diagnosed and first course of treatment at the reporting institution before the reference date of the registry.
- 5 = First diagnosed at autopsy.
- 6 = Diagnosed and all of the first course of treatment only in a staff physician's office.
- 7 = Pathology report only. Patient does NOT enter the facility at any time for diagnosis or treatment.
- 8 = Diagnosis established only by death certificate.
- 9 = Unknown

Item 21. Medical Record Number

If the patient has been assigned a medical record number, enter that number.

If your hospital registry abstracts cases for another hospital, it should have a system that identifies the facility associated to the patient. This can be done by assigning a unique suffix or prefix number to correspond with each facility and by communicating the system to the state registry staff.

If no medical record number exists for the patient, enter “none.”

Item 22. Laboratory Record Number

If a case has been assigned a laboratory record number, enter that number.

If more than one laboratory record number has been assigned to the case, enter the number which most closely corresponds with the initial diagnosis of the primary tumor being reported.

If no laboratory number exists, enter “none.”

If not reporting, leave the item blank.

Item 23. Case finding Source

Enter the code for the source that first identified the tumor. Determine where the case was first identified and enter the appropriate code. In other words, what mechanism was used that identified the case for your review. Each case may have a different casefinding source.

If a death certificate, independent pathology laboratory report, consultation-only report from a hospital, or other report was used to identify a case that was then abstracted from a different source, enter the code for the source that first identified that case, not the source from which it was subsequently abstracted.

Codes are as follows:

10 = Reporting Hospital, NOS

20 = Pathology Department Review (surgical pathology reports, autopsies, or cytology report)

21 = Daily Discharge Review (daily screening of charts of discharged patients in the medical records department)

22 = Disease Index Review (review of disease index in the medical records department)

23 = Radiation Therapy Department/Center

24 = Laboratory Reports (other than pathology reports, code 20)

25 = Outpatient Laboratory

- 26 = Diagnostic Imaging/Radiology (other than radiation therapy codes 23; includes nuclear medicine)
- 27 = Tumor Board
- 28 = Hospital Rehabilitation Service or Clinic
- 29 = Other Hospital Source (includes clinic, NOS or outpatient department, NOS)
- 30 = Physician-Initiated Case
- 40 = Consultation-only or Pathology-only Report (not abstracted by reporting hospital)
- 50 = Independent (non-hospital) Pathology-Laboratory Report
- 60 = Nursing Home
- 70 = Coroner's Office Records Review
- 80 = Death Certificate (case identified through death clearance)
- 85 = Out-of-State Case Sharing
- 90 = Other Non-Reporting Hospital Source
- 95 = Quality Control Review (case initially identified through quality control activities such as casefinding audit of a regional or central registry)
- 99 = Unknown

Item 24a. Primary Anatomical Site

Enter the primary anatomical site where the cancer began or originated.

The primary site can be located on the pathology report, attestation statement, history and physical examination, discharge summary, operative report, x-rays and scans.

Be as specific as possible, as many organs can be sub-divided into specific segments.

Example The pathology report indicates the tumor originated in the ascending colon. The primary site should be recorded as "ascending colon" and NOT "colon."

For leukemia and multiple myelomas, enter the primary site as bone marrow (C42.1).

Do NOT report the metastatic site(s) as the primary site.

If multiple primary tumors are diagnosed, complete a separate cancer report form for each primary site.

If the primary site cannot be determined, enter “*unknown primary site.*”

Do not leave this item blank.

NOTE: For further information, refer to the Primary Anatomical Site section.

Item 24b. Paired Organs (Laterality)

Laterality refers to a specific side of the body or lobe of an organ. In the case of paired or bilateral organs, it is important to indicate whether the primary site of the tumor is the right organ, the left organ, or bilateral involvement.

Laterality refers to the primary site only; **DO NOT** code the laterality of the metastatic site(s).

If the primary site is reported as “unknown primary site,” code the laterality to “0-not a paired site.”

The codes are as follows:

- 0 = Not a paired organ
- 1 = Right origin of primary
- 2 = Left origin of primary
- 3 = Origin in only one side but specific side unknown
- 4 = Bilateral involvement
- 9 = Paired organ with no information

NOTE: For further information refer to the Paired Organ section.

Item 25a. Clinical/Histological Diagnosis

Record the numerical value of the histology along with the narrative description of the histology. Be sure to be as specific as possible.

Example The pathology report indicates that the tumor is a “keratinizing squamous cell carcinoma.” Record “8071/3, keratinizing squamous cell carcinoma,” NOT simply “squamous cell carcinoma.”

The instructions for coding histology and behavior are found in the “Morphology” section of the ICD-O-3 “Coding Guidelines for Topography and Morphology” (ICD-O-3 pp. 27-30).

In addition you MUST download and print the Multiple Primary and Histology Coding Rules manual from <http://seer.cancer.gov/tools/mphrules/>. The Multiple Primary and Histology (MPH) Coding Rules replace all previous multiple histology rules. These rules are effective for cases diagnosed January 1, 2007 and after. Do not use the MPH rules to abstract cases diagnosed on or before December 31, 2006.

Use the multiple primary rules to determine whether the patient has a single or multiple primaries before coding the histology. Code the histology for each primary in a separate abstract.

Use the rules to make a decision on coding the histology for all reportable solid malignant tumors.

Use the **Site-specific Rules** for the following primary site groups excluding leukemia and lymphoma (M9590–9989) and Kaposi sarcoma (M9140):

Brain, malignant
(C70.0, C70.1, C70.9, C71.0–C71.9, C72.0–C72.5, C72.8, C72.9, C75.1–C75.3)
Breast (C50.0–C50.9)
Colon (C18.0–C18.9)
Head and neck (C00.0–C14.8, C30.0–C32.9)
Kidney (C64.9)
Lung (C34.0–C34.9)
Malignant melanoma of the skin (C44.0–C44.9 with Histology 8720–8780)
Renal pelvis, ureter, bladder, and other urinary
(C65.9, C66.9, C67.0–C67.9, C68.0–C68.9)

Use the **Other Sites Rules** for all solid malignant tumors that occur in primary sites not coded in the site specific rules.

If no microscopic diagnosis is available, enter the clinical diagnosis that describes the reportable condition.

If no histological diagnosis can be reached, or if no microscopic exam is available but a reportable diagnosis is suspected by a physician, report the suspected diagnosis.

Information about the 2007 Histology Coding Rules

Note: Do not use these rules to determine case reportability.

1. The 2007 multiple primary rules **replace all previous** multiple primary **rules**.
2. The rules are **effective** for cases **diagnosed January 1, 2007** and after. Do not use these rules to abstract cases diagnosed prior to January 1, 2007.
3. The histology coding rules are available in **three formats**: flowchart, text, and matrix. The **rules are identical**, only the formats differ. Use the set of rules in the format that is easiest for you to follow.
4. **Notes** and **examples** are included with some of the rules to **highlight key points** or to add **clarity** to the rules.
5. Rules are in **hierarchical** order within each section (Single Tumor and Multiple Tumors Abstracted as a Single Primary).

Ambiguous Terms Used to Code Histology

When any of the ambiguous terms are used to describe a more specific histology, code the more specific histology.

Ambiguous terms that are characteristic (used to code histology)
Apparent(ly)

Appears
 Comparable with
 Compatible with
 Consistent with
 Favor(s)
 Most likely
 Presumed
 Probable
 Suspect(ed)
 Suspicious (for)
 Typical (of)

Do not enter “unknown” or leave this item blank.

Item 25b. Tumor Grade

<i>Description</i>	<i>Code</i>
Grade I; grade i; grade 1; well differentiated; differentiated, NOS	1
Grade II; grade ii; grade 2; moderately differentiated; moderately well differentiated; intermediate differentiation	2
Grade III; grade iii; grade 3; poorly differentiated; dedifferentiated	3
Grade IV; grade iv; grade 4; undifferentiated; anaplastic	4
<i>Lymphomas and Leukemias</i>	
T-cell; T-precursor	5
B-cell; Pre- B, B-precursor	6
Null cell; Non T-non B	7
NK - Natural Killer Cell	8
<i>All Histologies</i>	
Cell type not determined; Not stated; Not applicable; Unknown Primary	9

The instructions for coding grade and differentiation are found in the “Morphology” section of the ICD-O-3 “Coding Guidelines for Topography and Morphology” (ICD-O-3 pp. 30–34).

FOR SITE-SPECIFIC GRADING SYSTEMS AND FURTHER INSTRUCTIONS, GO TO THE SECTION ‘TUMOR GRADE.’

For sites other than breast, prostate and kidney, code the tumor grade using the following priority order: ***1) terminology; 2) histologic grade; 3) nuclear grade.***

The tumor grade applies to the primary site ONLY.

The grade of a tumor represents the pathological description of the degree to which the tumor

tissue resembles normal tissue for that primary site. This is expressed in degrees of differentiation.

Enter the grade or degree of differentiation as stated in the FINAL pathologic diagnosis. If the primary site is reported as “unknown primary site,” enter the tumor grade as “9 - Unknown.”

Do **NOT** enter the grade of the metastatic(s) site. If a tumor grade is not given for the primary site, enter the code as “9 - Unknown.”

The grade of a tumor, including brain, can be established through magnetic resonance imaging (MRI) or positron emission tomography (PET) when there is no tissue diagnosis.

Coding Two-grade Systems

Two grade systems apply to colon, rectosigmoid junction, rectum (C18.0–C20.9), and heart (C38.0). Code these sites using a two-grade system; Low Grade (2) or High Grade (4). If the grade is listed as 1/2 or as Low Grade, then code 2. If the grade is listed as 2/2 or as High Grade, then code 4.

Coding Three-grade Systems

Three grade systems apply to peritoneum (C48.1, C48.2), breast (C50.0–C50.9), endometrium (C54.1), fallopian tube (C57.0), prostate (C61.9), kidney (C64.9), and brain and spinal cord (C71.0–C72.9). For sites other than breast, prostate and kidney, code the tumor grade using the following priority order: 1) Terminology; 2) Histologic Grade; and 3) Nuclear Grade.

Item 26. Date of Hospital Admission

Enter the month, day and year (mm/dd/yyyy) of the inpatient admission to the reporting facility for the most definitive surgery.

In the absence of surgery, use date of inpatient admission for any other therapy. In the absence of therapy, use date of inpatient admission for diagnostic evaluation.

Item 27. Date of Hospital Discharge

Enter the month, day and year (mm/dd/yyyy) of the inpatient discharge from the reporting facility for the most definitive surgery.

In the absence of surgery, use date of inpatient discharge for any other therapy. In the absence of therapy, use date of inpatient discharge for diagnostic evaluation.

Item 28. Date of Diagnosis

Enter the month, day and year (mm/dd/yyyy) that the primary cancer was first diagnosed by a recognized medical practitioner.

If the diagnosis was determined by pathological examination, use the date the specimen was taken (date of biopsy or surgery), NOT the date the specimen was read by the pathologist or the date the report was dictated, transcribed or printed.

If the physician states that in retrospect the patient had cancer at an earlier date, then use the earlier date as the date of diagnosis.

Though the original diagnosis may be a clinical diagnosis that is later confirmed through pathological examination or other procedures, the clinical diagnosis date should be reported.

Example A patient underwent a mammogram on August 25, 1999. The radiologist read the report as suspicious for cancer, recommending biopsy. The patient does not get a biopsy until February 4, 2000 which reveals an infiltrating ductal adenocarcinoma.
Record the date of diagnosis as August 25, 1999.

If the month is unknown, use the month of **July (7)** for the month of diagnosis.

If the day is unknown, use the **fifteenth (15)** for the day of diagnosis.

If the year is unknown, estimate the diagnosis year based upon documentation in the medical record and how long the patient has had the diagnosis.

If an approximation is not possible, use the date first confirmed, first treated, or in the case of death, the date of death, whichever is earliest.

If a patient is diagnosed elsewhere before entering the reporting facility and the date of diagnosis is unknown, record the date the patient was first seen at the reporting hospital.

Use the date therapy was started as the date of diagnosis if the patient receives cancer directed treatment before a definitive diagnosis.

The date of death is the date of diagnosis for cases diagnosed at autopsy.

If information is limited to a description, use the following:

"Spring"	April
"Middle of the year"	July
"Fall of the year"	October
"Winter of"	January or December

Do not leave this item blank.

Item 29. Method of Diagnosis

Diagnostic confirmation specifies whether a malignancy was confirmed microscopically AT ANY TIME during the disease course. This is a priority coding scheme with **code 1** taking precedence. A low number takes priority over all higher numbers.

<i>Microscopically Confirmed</i>		
<i>Code</i>	<i>Definition</i>	<i>Explanation</i>
1	Positive histology	Tissue specimens from biopsy, frozen section, surgery, autopsy, or dilation and curettage (D&C). Tissue is microscopically examined.

<i>Microscopically Confirmed</i>		
<i>Code</i>	<i>Definition</i>	<i>Explanation</i>
		<p>Bone marrow biopsy and bone marrow aspiration.</p> <p>Hematologic confirmation of leukemia (i.e. peripheral blood smear)</p>
2	Positive cytology	<p>Microscopic examination of cells removed from a neoplasm. Fine needle aspiration (FNA) is frequently used to obtain a cytologic specimen. Cells may be recovered from exudate, secretions, or washings from tissue.</p> <p>No tissue microscopically examined; fluid cells microscopically examined.</p> <p><i>Examples:</i> breast secretion bronchial brushing bronchial washings cervical smear (pap smear) gastric fluid paraffin block from spinal, pleural or peritoneal fluid prostatic secretions spinal fluid sputum smears tracheal washings urinary sediment vaginal smears</p>
4	Positive microscopic confirmation, method not specified	Microscopic confirmation is all that is known. It is unknown if the cells were examined by histology or cytology.
5	Positive laboratory test/marker study	<p>A diagnosis of cancer is based on certain laboratory tests or marker studies that are CLINICALLY DIAGNOSTIC. This includes the presence of alpha-fetoprotein for liver cancer and an abnormal electrophoretic spike for multiple myeloma and Waldenstrom's macroglobulinemia.</p> <p>An elevated PSA is non-diagnostic of cancer. If the physician uses the PSA as a basis for diagnosing prostate cancer with no other work-up, record the code as 5.</p>
6	Direct visualization without microscopic confirmation	<p>Diagnosis which is confirmed by surgical exploration or endoscopy that is not supplemented by positive histology or cytology. i.e. colposcope, mediastinoscope, peritoneoscope.</p> <p>An autopsy only case (information obtained is from the gross autopsy report), diagnosis not confirmed by microscopic tissue analysis.)</p>

<i>Microscopically Confirmed</i>		
<i>Code</i>	<i>Definition</i>	<i>Explanation</i>
7	Radiography and other imaging techniques without microscopic confirmation	The malignancy was reported by the physician from an imaging technique report only. Example: ultrasound, computerized (axial) tomography (CT or CAT scans) and magnetic resonance imaging (MRI).
8	Clinical diagnosis only (other than 5,6,7)	Cases diagnosed by clinical methods not mentioned previously. i.e. mass in breast suspect a malignancy; no biopsies were taken. Refer to the list of “Ambiguous Terminology” for language that represents a diagnosis of cancer.
9	Unknown whether or not microscopically confirmed	A statement of malignancy was reported in the medical record, but there is no statement of how the cancer was diagnosed. Death certificate only cases.

Item 30. EOD Tumor Size

Code this data item for cases diagnosed on or before December 31, 2003.

Code tumor size using *CS Tumor Size* for cases diagnosed on or after January 1, 2004.

Code the exact size of the primary tumor in millimeters (mm). To convert centimeters to millimeters, move the decimal point over one digit to the right (or multiply the centimeters by 10) and round off to the nearest tenth if necessary.

Example: 3.2 cm becomes 032 mm
3.21 cm becomes 3.2 cm and is recorded as 032
2.16 cm becomes 2.2 cm and is recorded as 022

For melanomas of the skin (C44.0–C44.9), vulva (C51.0–C51.9), penis (C60.0–C60.9), scrotum (C63.2), and conjunctiva (C69.0), code the depth of invasion in HUNDREDTHS of millimeters.

Code 989 for melanomas of the skin (C44.0–C44.9), vulva (C51.0–C51.9), penis (C60.0–C60.0), scrotum (C63.3), and conjunctiva (C69.0) which are 9.89 mm or greater in depth.

Code the largest dimension or diameter of the tumor, whether it is from a biopsy specimen or the complete resection of the primary tumor.

Code the size of the primary tumor, not the size of polyps, ulcers, cysts, or metastases.

Record the size of the tumor from the pathology report, if available.

Information on tumor size from imaging/radiographic techniques can be used to code size, but should be taken as low priority, just above physical exam.

Code 001 for tumors less than 1 mm in size.

Code the size as stated for purely *in situ* tumors.

If both an *in situ* and an invasive component are present, and each is measured, code the size of the invasive component even if it is smaller.

Code 990, use when no gross tumor is seen and tumor is only identified microscopically.

Code 998 when the following terms describe tumor involvement for these specified sites:

Esophagus (C15.0–C15.5, C15.8–C15.9): Entire circumference
Stomach (C16.0–C16.6, C16.8–C16.9): Diffuse, widespread—³/₄ or more, linitis plastica
Colorectal (M-8220/8221 with /2 or /3): Familial/multiple polyposis
Lung and main stem bronchus (C34.0–C34.3, C34.8–C34.9): Diffuse, entire lobe or lung
Breast (C50.0–C50.6, C50.8–C50.9): Diffuse.

Code 999, unknown, if only one size is given for a mixed *in situ* and invasive tumor.

Code the size of the residual tumor if an excisional biopsy is performed and residual tumor at time of resection of the primary site is found to be larger than the excisional biopsy.

Do not add pieces or chips together to create a whole; they may not be from the same location, or they may represent only a very small portion of a large tumor. A clinical size may be possible from physical examination, ultrasound of the prostate or cystoscopy of the bladder.

Code 999 if the size of the tumor is unknown or the tumor size is not documented in the patient record.

Code 999 for a needle biopsy specimen.

Code 999 for histologies or sites where size is not applicable:

Unknown or ill-defined primary (C76.0–C76.8, C80.9)
Hematopoietic, reticuloendothelial, immunoproliferative or myeloproliferative disease
(C42.0, C42.1, C42.3, C42.4 and/or M-9750, 9760–9764, 9800–9820, 9826,
9831–9920, 9931–9964, 9980–9989)
Multiple myeloma (9732)
Letterer-Siwe disease (9754)

If the patient received neoadjuvant (presurgical) radiation or systemic therapy (chemotherapy, hormone therapy, and/or immunotherapy), then code the size of tumor documented prior to the start of first course therapy, **do not** code the size of tumor recorded in the pathology report.

Item 31. General Summary Stage

The summary stage applies to the primary site ONLY.

Use SEER Summary Staging Manual - 2000, Codes and Coding Instructions for cases diagnosed *on or after* January 1, 2001.

Download and print the manual from <http://seer.cancer.gov/tools/ssm/>

The summary stage should include all information available through completion of surgery(ies) in the *first course of treatment or within four months from the date of initial diagnosis*.

The codes are as follows:

0 = In situ, Intraepithelial, Noninvasive, Noninfiltrating

1 = Localized ONLY (within organ)

2 = Regional by direct extension ONLY

3 = Regional to lymph node(s) ONLY

4 = Regional by BOTH direct extension AND regional lymph node(s) involved

5 = Regional, NOS (not otherwise specified)

7 = Distant site(s)/lymph node(s) involved or Systemic

8 = BENIGN

9 = Unknown if extension or metastasis

Unknown primary site

Death certificate only case

Class of case 3 or 4 when stage at initial diagnosis is unknown

For further instructions see the Summary Staging section.

Do not leave this item blank.

Item 32. AJCC Stage

The need to report AJCC stage information is restricted to facilities operating cancer registries and with staff trained to determine AJCC stage.

The American Joint Committee on Cancer (AJCC) stage is ONLY required for hospitals with a registry.

Refer to the appropriate AJCC Cancer Staging Manual, based upon the date of initial diagnosis to determine the stage.

Cases diagnosed *on or after* January 1, 2003 - Sixth Edition.

Cases diagnosed *between* January 1, 1998 and December 31, 2002 - Fifth Edition.

If you are unable to use the appropriate edition of the AJCC Cancer Staging Manual based upon the date of initial diagnosis, use the most current edition to stage the case. It is then very critical that you indicate which edition was used to determine the stage.

Clinical classification is based upon information and evidence obtained before treatment.

Pathological classification is based upon information obtained before treatment AND is supplemented by additional evidence from surgery and the pathologic examination of the resected specimen.

If not reporting, leave this item blank.

Item 33. CS Tumor Size (mm)

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Record the largest dimension or diameter of the **primary tumor**, and always in millimeters. To convert centimeters to millimeters, multiply the dimension by 10. If tumor size is given in tenths of millimeters, round down if between .1 and .5 mm, and round up if between 0.6 and 0.9 mm.

Record tumor size information in the following order:

Record tumor size from the pathology report, if it is available, when the patient receives no radiation or systemic treatment prior to surgery.

If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, code the largest size of tumor whether prior to or following treatment.

Information on size from imaging/radiographic techniques can be used to code size when there is no more specific size information from a pathology or operative report.

If there is a difference in reported tumor size among imaging and radiographic techniques, record the largest size of tumor reported in the record.

Record the exact size of the primary tumor for all sites/histologies except those for which it is stated to be not applicable. Code 999 if no size is given.

Always code the size of the primary tumor, not the size of the polyp, ulcer, cyst, or distant metastasis. However, if the tumor is described as a “cystic mass,” and only the size of the entire mass is given, code the size of the entire mass, since the cyst is part of the tumor itself.

Record the largest dimension or diameter of tumor, whether it is from an excisional biopsy specimen or the complete resection of the primary tumor.

Record the size of the invasive component, if given.

If both an in situ and an invasive component are present, and the invasive component is measured, record the size of the invasive component even if it is smaller.

Additional rule for breast primaries: If the size of the invasive component is **not** given, record the size of the entire tumor from the surgical report, pathology report, radiology report or clinical examination.

For purely in situ lesions, code the size as stated.

Microscopic residual tumor does not affect overall tumor size.

Do **not** add pieces or chips together to create a whole. However, if the pathologist states an aggregate or composite size (determined by fitting the tumor pieces together and measuring the total size), record that size.

Code tumor size 999 for an incisional needle biopsy. On rare occasions, an incisional needle biopsy may remove an entire tumor. In this event, the tumor size may be recorded.

Record tumor size (lateral dimension) for malignant melanoma. Depth of invasion is coded in a site specific factor (SSF).

Tumor dimension is to be recorded for all schemas, except as noted below.

The descriptions in code 998 take precedence over any mention of size. Code 998 is used only for the following sites:

Esophagus (C15.0–C15.5, C15.8–C15.9): Entire circumference
Stomach (C16.0–C16.6, C16.8–C16.9): Diffuse, widespread—³/₄ or more, linitis plastica
Colorectal (M-8220/8221 with /2 or /3): Familial/multiple polyposis
Lung and main stem bronchus (C34.0–C34.3, C34.8–C34.9): Diffuse, entire lobe or lung
Breast (C50.0–C50.6, C50.8–C50.9): Diffuse.

Code 990, should be used when no gross tumor is seen and tumor is only identified microscopically.

NOTE: The terms microscopic focus, micro-focus, and micro-invasion are **not** the same as [macroscopic] focal or focus. A macroscopic focus or foci indicates a very small or isolated area, pinpoint, or spot of tumor that may be visible grossly. Only tumor identified microscopically should be coded 990.

Codes 991 through 995 are non-specific size descriptions that, for some sites, are used to determine a T category. If a specific size is given, code the more precise size in the range 001–989.

See the individual site/histology schemas for further information and definitions.

For the following diagnoses and/or primary sites, size is not applicable. Record as code 888.

Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative Neoplasms (M-9731–9734, 9740–9742, 9750–9758, 9760–9762, 9764–9769, 9800–9801, 9805, 9820, 9823, 9826–9827, 9831–9837, 9840, 9860–9861, 9863, 9866–9867, 9870–9876, 9891, 9895–9897, 9910, 9920, 9930–9931, 9940, 9945–9946, 9948, 9950, 9960–9964, 9970, 9975, 9980, 9982–9987, 9989)

Hodgkin and non-Hodgkin Lymphoma (M-959 –972 EXCEPT 9700/3 and 9701/3)

Unknown and Ill-Defined Primary Sites (C42.0–C42.4, C76.0–C76.5, C76.7–C76.8, C77.0–C77.5, C77.8–C77.9, C80.9; **Note:** For C42._ and C77._, other than hematopoietic, reticuloendothelial, immunoproliferative and myeloproliferative neoplasms as listed above, Hodgkin and non-Hodgkin Lymphomas as listed above, and Kaposi sarcoma 9140/3)

Code Definitions

000 Indicates no mass or no tumor found; for example, when a tumor of a stated primary site is not found, but the tumor has metastasized.

001–988 Exact size in millimeters.

989 for 989 millimeters or larger.

990 Microscopic focus or foci only; no size of focus is given.

991 Described as less than 1 cm.

992 Described as less than 2 cm; greater than 1 cm; or, between 1 cm and 2 cm.

993 Described as less than 3 cm; greater than 2 cm; or, between 2 cm and 3 cm.

994 Described as less than 4 cm; greater than 3 cm; or, between 3 cm and 4 cm.

995 Described as less than 5 cm; greater than 4 cm; or, between 4 cm and 4 cm.

999 Unknown; size not stated; not stated in patient record.

Item 34. CS Extension

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Identifies contiguous growth (extension) of the primary tumor within the organ of origin or its direct extension into neighboring organs. For certain sites such as ovary, discontinuous metastasis is coded in *CS Extension*. See site-specific schemas for detailed codes and coding instructions.

Code the farthest documented extension of the primary tumor. Do not include discontinuous metastases to distant sites which are coded in *CS Mets at Dx* (NAACCR Item #2850) except for ovary and corpus uteri.

Record extension information in the following order:

Record extension from the pathology report, if it is available, when the patient receives no radiation or systemic treatment prior to surgery.

If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, code the farthest extension, whether it was identified clinically prior to treatment or pathologically following treatment.

Information on extent of disease from imaging/radiographic techniques can be used to code extension when there is no more specific extension information from a pathology or operative report.

If an involved organ or tissue is not mentioned in the schema, approximate the location and code by comparing it with listed organs or tissues in the same anatomic area.

With the exception of corpus uteri and ovary, all codes represent contiguous (direct) extension of tumor from the site of origin to the organ/structure/tissue represented in the code.

Refer to the Ambiguous Terminology section of the *CS Manual* for terms that constitute tumor involvement or extension.

If the information in the medical record is ambiguous or incomplete regarding the extent to which the tumor has spread, the extent of disease may be inferred from the T category stated by the physician.

If the only indication of extension in the record is the physician's statement of a T category from the TNM staging system or a stage from a site-specific staging system, such as Dukes' C, record the numerically lowest equivalent extension code for that T category.

Some site or histology schemas include designations such as T1, NOS; T2, NOS; Localized, NOS; and other non-specific categories. The NOS is added when there is further breakdown of the category into subsets (such as T1a, T1b, T1c), but the correct subset cannot be determined. The NOS designation, which can appear in both the descriptions of codes and the mapping, is not official AJCC descriptive terminology. The NOS should be disregarded in reports and analyses when it is not a useful distinction.

The data collector should only code to a category such as "Stated as T1 NOS" when the appropriate subset (e.g., T1a or T1b) cannot be determined.

Distant metastases must be coded in *CS Mets at Dx* (NAACCR Item #2850). Do not code *CS Extension* as in situ if there is any evidence of nodal or metastatic involvement; use the code for 'Localized, NOS' if there is no better information.

The presence of microscopic residual disease or positive tumor margins does not increase the extension code.

Item 35. CS Tumor Size/Ext Evaluation

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Records how the codes for the two items *CS Tumor Size* (NAACCR Item #2800) and *CS Extension* (NAACCR Item #2810) were determined, based on the diagnostic methods employed.

Select the code that documents the report or procedure from which the information about the farthest extension or size of the primary tumor was obtained. This may not be the numerically highest eval code.

For primary sites/histologies where tumor size is not a factor in determining the T category in TNM (see Table 5 in General Instructions of the *CS Manual*), code this data item on the basis of *CS Extension* (NAACCR Item #2810) only.

For primary sites where both tumor size and extension determine the T category in TNM (see Table 4 in the General Instructions), select the code that best explains how the information in the *CS Tumor Size* (NAACCR Item #2800) and *CS Extension* (NAACCR Item #2810) data items were determined.

Code 0, 1, or 9 if the patient had no surgery.

Exception: Lung cancer with mediastinoscopy showing direct extension into mediastinum. Use code 1. Staging algorithm will identify information as pathologic (p), because mediastinoscopy is defined as a pathologic procedure in TNM.

Code 3 or 9 if the patient had surgery followed by other treatment(s).

Code 3 or 6 if the size or extension of the tumor was greater after treatment than before treatment.

Code 5 or 6 if the size or extension of the tumor determined prior to treatment was the basis for neoadjuvant therapy.

Code 2 if the patient had an autopsy and the diagnosis was known or suspected prior to death.

Code 8 if the patient had an autopsy and the malignancy was not known or suspected prior to death.

For sites/histologies where there is no TNM schema, this data item may be coded 9, “Not applicable.” (See Table 6 in General Instructions of the *CS Manual*.)

Code 0 includes imaging studies such as standard radiography, special radiographic projections, tomography, computerized tomography (CT), ultrasonography, lymphography, angiography, scintigraphy (nuclear scans), magnetic resonance imaging (MRI), positron emission tomography (PET) scans, spiral scanning (CT or MRI) and other non-invasive methods of examining tissues.

Code 1 also includes observations at surgery, such as an exploratory laparotomy in which unresectable pancreatic cancer is identified, where further tumor extension is not biopsied. Use code 3 for a biopsy of tumor extension that meets the requirements for pathologic staging basis.

That is, if the biopsy documents the highest T category, the biopsy meets the requirements for pathologic staging basis and *CS Tumor Size/Ext Eval* should be coded 3.

Code Definitions

0 = No surgical resection done. Evaluation based on physical examination, imaging examination, or other non-invasive clinical evidence. No autopsy evidence used.

1 = No surgical resection done. Evaluation based on endoscopic examination, diagnostic biopsy, including fine needle aspiration biopsy, or other invasive techniques. No autopsy evidence used. Does not meet criteria for AJCC pathologic staging.

2 = No surgical resection done, but evidence derived from autopsy (tumor was suspected or diagnosed prior to autopsy).

3 = Surgical resection performed WITHOUT pre-surgical systemic treatment or radiation; **OR** surgical resection performed, unknown if pre-surgical systemic treatment or radiation performed. Meets criteria for AJCC pathologic staging. Evaluation based on evidence acquired before treatment, supplemented or modified by the additional evidence acquired during and from surgery, particularly from pathologic examination of the resected specimen.

5 = Surgical resection performed WITH pre-surgical systemic treatment or radiation; tumor size/extension based on clinical evidence.

6 = Surgical resection performed WITH pre-surgical systemic treatment or radiation, BUT tumor size/extension based on pathologic evidence.

8 = Evidence from autopsy only (tumor was unsuspected or undiagnosed prior to autopsy).

9 = Unknown if surgical resection done.
Not assessed; cannot be assessed; unknown if assessed.
Not documented in patient record.
For sites with no TNM schema: not applicable

Item 36. CS Lymph Nodes

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Identifies the regional lymph nodes involved with cancer at the time of diagnosis.

Record the specific regional lymph node chain farthest from the primary site that is involved by tumor either clinically or pathologically.

Regional lymph nodes are listed for each site/histology. In general, the regional lymph nodes in the chain closest to the primary site have the lower codes. Nodes farther away

from the primary or in farther lymph node chains have higher codes. Record the highest applicable code.

Exception: The higher codes for ‘Regional lymph nodes, NOS’; ‘Lymph nodes, NOS’; ‘Stated as N1, no other information’; ‘Stated a N2a, no other information’; and so forth, should only be used when there is no available information as to the name(s) of the regional nodes involved.

Record involved regional lymph nodes from the pathology report, if it is available, when the patient receives no radiation or systemic treatment prior to surgery.

If there is a discrepancy between clinical information and pathologic information about the same lymph nodes, the pathologic information takes precedence.

For inaccessible sites, primarily for localized or early stage (T1, T2) cancers: record regional lymph nodes as negative rather than unknown (based on clinical evaluation) when there is no mention of regional lymph node involvement in the physical examination, pre-treatment diagnostic testing or surgical exploration, and the patient receives what would be usual treatment to the primary site.

If there is direct extension of the primary tumor into a regional lymph node, record the involved node in this data item.

If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, the clinical status of the lymph nodes takes precedence.

Code 00 for lymph node involvement when the *CS Extension* (NAACCR Item #2810) is coded in situ, even if no lymph nodes are removed, since “in situ” by definition means noninvasive.

For solid tumors, the terms “fixed” or “matted” and “mass in the hilum, mediastinum, retroperitoneum, and/or mesentery” (with no specific information as to tissue involved) are considered involvement of lymph nodes.

Any other terms such as “palpable,” “enlarged,” “visible swelling,” “shotty,” or “lymphadenopathy” should be ignored (except for adenopathy, enlargement, and mass in the hilum or mediastinum for lung primaries), unless there is a statement of involvement by the clinician.

For lymphomas, *any* mention of lymph nodes is indicative of involvement.

The terms “homolateral,” “ipsilateral,” and “same side” are used interchangeably.

Any unidentified nodes included with the resected primary site specimen are to be coded as ‘Regional lymph nodes, NOS.’

Where more specific categories are provided, the codes for ‘Regional lymph nodes, NOS’ and ‘Lymph nodes, NOS’ should be used *only* after an exhaustive search for more specific information.

When size of involved regional lymph nodes is required, code from pathology report, if available.

Code the size of the metastasis, not the entire node, unless otherwise stated in site-specific schemas. The size of the metastasis within the lymph node can be inferred if the size for the entire node falls within one of the codes; for example, a single involved node 1.5 cm in size can be coded to “single lymph node # 2cm” because the metastasis cannot be larger than 1.5 cm.

If the only indication of lymph node involvement in the record is the physician’s statement of an N category from the TNM staging system or a stage from a site-specific staging system, such as Dukes’ C, record the numerically lowest equivalent *CS Lymph Nodes* code for that N category.

If there is a discrepancy between documentation in the medical record and the physician’s assignment of TNM, the documentation takes precedence. Cases of this type should be discussed with the physician who assigned the TNM.

If the information in the medical record is ambiguous or incomplete regarding the extent to which the tumor has spread, lymph node involvement may be inferred from the N category stated by the physician.

Item 37. CS Regional Nodes Evaluation

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Records how the code for *CS Lymph Nodes* (NAACCR Item #2830) was determined, based on the diagnostic methods employed.

Select the code that documents the report or procedure from which the information about the farthest involved regional lymph nodes was obtained; this may not be the numerically highest eval code.

Code 9 may be used for this data item for sites/histologies where there is no TNM schema (see Table 5 in General Instructions of the *CS Manual*).

Select the code that best explains how the information for *CS Lymph Nodes* (NAACCR Item #2830) was determined.

Code 0, 1, or 9 if the patient had no removal of lymph node(s).

Code 3 or 9 if the patient had removal of lymph node(s) surgery followed by other treatment(s).

Code 5 or 6 if the size, number, or extension of regional lymph node involvement determined prior to treatment was the basis for neoadjuvant therapy.

Code 3 or 6 if the size, number, or extension of regional lymph node involvement was greater after treatment than before treatment.

Code 2 if the patient had an autopsy and the diagnosis was known or suspected prior to death.

Code 8 if the patient had an autopsy and the malignancy was not known or suspected prior to death.

Code 0 includes imaging studies such as standard radiography, special radiographic projections, tomography, computerized tomography (CT), ultrasonography, lymphography, angiography, scintigraphy (nuclear scans), magnetic resonance imaging (MRI), positron emission tomography (PET) scans, spiral scanning (CT or MRI) and other non-invasive methods of examining tissues.

Code 1 includes microscopic analysis of tissue insufficient to meet the requirements for pathologic staging in the TNM system.

Code 3 if the lymph node procedure meets the requirements for the pathologic staging basis of regional lymph nodes.

Code 1 also includes observations at surgery, such as abdominal exploration at the time of a colon resection, where regional lymph nodes are not biopsied.

Code definitions:

0 = No regional lymph nodes removed for examination. Evaluation based on physical examination, imaging, or other non-invasive clinical evidence. No autopsy evidence used.

1 = No regional lymph nodes removed for examination. Evaluation based on endoscopic examination, diagnostic biopsy including fine needle aspiration of lymph node(s) or other invasive techniques. No autopsy evidence used. Does not meet criteria for AJCC pathologic staging.

2 = No regional lymph nodes removed for examination, but evidence derived from autopsy (tumor was suspected or diagnosed prior to autopsy)

3 = Regional lymph nodes removed for examination (removal of at least 1 lymph node) **without** pre-surgical systemic treatment or radiation; OR lymph nodes removed for examination, unknown if pre-surgical systemic treatment or radiation performed. Meets criteria for AJCC pathologic staging.

5 = Regional lymph nodes removed for examination **with** pre-surgical systemic treatment or radiation, and lymph node evaluation based on clinical evidence

6 = Regional lymph nodes removed for examination **with** pre-surgical systemic treatment or radiation, **but** lymph node evaluation based on pathologic evidence

8 = Evidence from autopsy; tumor was unsuspected or undiagnosed prior to autopsy a

9 = Unknown if lymph nodes removed for examination

Not assessed; cannot be assessed
Unknown if assessed
Not documented in patient record

Item 38. CS Regional Lymph Nodes Positive

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Code 00 = All nodes examined are negative.

Code 01-89 = 1-89 nodes are positive. (Code exact number of nodes positive)

Code 90 = 90 or more nodes are positive.

Code 95 = Positive aspiration or core biopsy of lymph node(s) was performed.

Code 97 = Positive nodes are documented, but the number is unspecified.

Code 98 = No nodes were examined.

Code 99 = It is unknown whether nodes are positive; not applicable; not stated in patient record.

1. Record information about only regional lymph nodes in this field. Involved distant lymph nodes should be coded in the “CS Mets at Dx” field.
2. Rules for coding Regional Nodes Positive are the same for both in situ and invasive cases.
3. This field is based on pathologic information only. If no lymph nodes were removed for examination, or if a lymph node drainage area was removed but no lymph nodes were found, code as 98.
4. Record the total number of regional lymph nodes removed and found to be positive by pathologic examination.
 - a. The number of regional lymph nodes positive is cumulative from all procedures that removed lymph nodes through the completion of surgeries in the first course of treatment.
 - b. This field is to be recorded regardless of whether the patient received preoperative treatment.
5. Any combination of positive aspirated, biopsied, sampled or dissected lymph nodes should be coded to 97 if the number of involved nodes cannot be determined on the basis of cytology or histology.
6. For the following primary sites and histologies, the Regional Nodes Positive field is always coded as 99.

Placenta
Brain and Cerebral Meninges

Other Parts of Central Nervous System
Hodgkin and non-Hodgkin Lymphoma
Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative
Neoplasms
Other and Ill-Defined Primary Sites
Unknown Primary Site

Item 39. CS Regional Lymph Nodes Examined

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Code 00 = No nodes were examined.

Code 01 – 89 = 1-89 nodes were examined. (Code the exact number of regional lymph nodes examined.)

Code 90 = 90 or more nodes were examined.

Code 95 = No regional nodes were removed, but aspiration or core biopsy of regional nodes was performed.

Code 96 = Regional lymph node removal was documented as a sampling, and the number of nodes is unknown/not stated.

Code 97 = Regional lymph node removal was documented as a dissection, and the number of nodes is unknown/not stated.

Code 98 = Regional lymph nodes were surgically removed, but the number of lymph nodes is unknown/not stated and not documented as a sampling or dissection; nodes were examined, but the number is unknown.

Code 99 = It is unknown whether nodes were examined; not applicable or negative; not stated in patient record.

1. Record information about only regional lymph nodes in this field. Distant lymph node information should be coded in the ACS Mets at Dx@ field.
2. Rules for coding Regional Nodes Examined are the same for in situ and invasive cases.
3. This field is based on pathologic information only. If no lymph nodes were removed for examination, or if a lymph node drainage area was removed but no lymph nodes were found, code as 00. If it is unknown whether nodes were removed or examined, code as 99.
4. Record the total number of regional lymph nodes removed and examined by the pathologist.
 - a. The number of regional lymph nodes examined is cumulative from all procedures that removed lymph nodes through the completion of surgeries in the first course of treatment.
 - b. If lymph nodes are aspirated and other lymph nodes are removed, use code 98.

c. This field is to be recorded regardless of whether the patient received preoperative treatment.

5. If a lymph node biopsy was performed, code the number of nodes removed, if known. If the number of nodes removed by biopsy is not known, use code 96.

6. For the following primary sites and histologies, the Regional Nodes Examined field is always coded as 99.

Brain and Cerebral Meninges
Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative
Neoplasms
Hodgkin and non-Hodgkin Lymphoma
Other and Ill-Defined Primary Sites
Other Parts of Central Nervous System
Placenta
Unknown Primary Site

Item 40. CS Mets at Diagnosis

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Summary This data item represents distant metastases (the TNM M component or distant stage in Staging) at the time of diagnosis. In other words, when the patient was diagnosed, tumor had already spread indirectly (through vascular or lymph channels) to a site remote from the primary tumor.

Assign the highest applicable code for metastasis at diagnosis, whether the determination was clinical or pathological and whether or not the patient had any preoperative systemic therapy.

Metastasis known to have developed after the extent of disease was established (also referred to as progression of disease) should not be recorded in this data item.

Record CS Mets at Dx as code 00 (none) rather than code 99 (unknown) when the clinician proceeds with standard treatment of the primary site for localized or early (T1, T2) stage, since this action presumes that there is no distant metastasis that would otherwise alter the treatment approach. Code 99 can and should be used in situations where there is reasonable doubt that the tumor is no longer localized and there is no documentation of distant metastasis.

If the only indication of extension in the record is the physician's statement of an M category from the TNM staging system or a stage from a site-specific staging system, such as Dukes' D, record the numerically lowest equivalent extension code for that M category. In most cases, this will be 40, 'Distant metastasis, NOS.'

Item 41. CS Mets Evaluation

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Records how the code for *CS Mets at Dx* (NAACCR Item #2850) was determined based on the diagnostic methods employed.

Select the CS Mets Eval code that documents the report or procedure from which the information about metastatic involvement farthest from the primary site was obtained; this may not be the numerically highest eval code.

Code 9 may be used for primary sites/histologies where there is no TNM schema (See Table 4 of the *CS Manual*).

Select the code that best explains how the information in *CS Mets at Dx* (NAACCR Item #2850) was determined.

Code 0, 1, or 9 if the patient had no examination of metastatic tissue.

Code 3 if the patient had removal of presumed metastatic tissue (even though the pathology report was negative).

Code the method of evaluation for the site(s) farthest from the primary.

Code 8 if metastasis at diagnosis was identified at autopsy.

Code 2 if the patient had an autopsy and the diagnosis was known or suspected prior to death.

Code 8 if the patient had an autopsy and the malignancy was not known or suspected prior to death.

Code 6 if biopsies taken after pre-operative treatment are negative for metastasis and clinical evidence of metastasis remains.

Code 0 includes imaging studies such as standard radiography, special radiographic projections, tomography, computerized tomography (CT), ultrasonography, lymphography, angiography, scintigraphy (nuclear scans), magnetic resonance imaging (MRI), positron emission tomography (PET) scans, spiral scanning (CT or MRI) and other non-invasive methods of examining tissues.

Code 1 includes microscopic analysis of tissue insufficient to meet the requirements for pathologic staging in the TNM system.

Code 3 if the diagnosis of distant metastasis meets the requirements for the pathologic staging basis.

Code 1 also includes observations at surgery, such as abdominal exploration at the time of a colon resection, where distant metastasis is not biopsied.

Code definitions:

0 = No pathologic examination of metastatic tissue performed. Evaluation of distant metastasis based on physical examination, imaging examination, and/or other noninvasive clinical evidence. No autopsy evidence used.

1 = No pathologic examination of metastatic tissue performed. Evaluation of distant metastasis based on endoscopic examination or other invasive technique. No autopsy evidence used. Does not meet criteria for AJCC pathologic staging of distant metastasis.

2 = No pathologic examination of metastatic tissue done prior to death, but evidence derived from autopsy (tumor was suspected or diagnosed prior to autopsy).

3 = Pathologic examination of metastatic tissue performed **without** pre-surgical systemic treatment or radiation; **OR** pathologic examination of metastatic tissue performed, unknown if pre-surgical systemic treatment or radiation performed. Meets criteria for AJCC pathologic staging of distant metastasis.

5 = Pathologic examination of metastatic tissue performed **with** pre-surgical systemic treatment or radiation, and metastasis based on clinical evidence

6 = Pathologic examination of metastatic tissue performed **with** pre-surgical systemic treatment or radiation, **but** metastasis based on pathologic evidence

8 = Evidence from autopsy; tumor was unsuspected or undiagnosed prior to autopsy a

9 = Not assessed; cannot be assessed; unknown if assessed; not documented in patient record. For sites with no TNM staging: Not applicable

Item 42. CS Site-Specific Factor 1

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Site-specific factors are used to record additional staging information needed by Collaborative Staging to derive TNM and/or SEER Summary Stage codes for particular site-histology schema.

Code 888 if there is no site/histology-specific factor for a schema.

The following primary sites/histologies use *Site-Specific Factor 1* to code information. See the site specific schemas for acceptable codes and their definitions.

Site/Histology	Factor
Head and neck	Size of Lymph Nodes

Colon	Carcinoembryonic Antigen (CEA)
Rectosigmoid, rectum	Carcinoembryonic Antigen (CEA)
Liver	Alpha Fetoprotein (AFP)
Malignant Melanoma of Skin, Vulva, Penis, Scrotum	Measured Thickness (Depth), Breslow's Measurement
Mycosis Fungoides	Peripheral Blood Involvement
Breast	Estrogen Receptor Assay (ERA)
Ovary	Carbohydrate Antigen 125 (CA-125)
Placenta	Prognostic Scoring Index
Prostate	Prostatic Specific Antigen (PSA) Lab Value
Testis	Alpha Fetoprotein (AFP)
Malignant Melanoma of Conjunctiva	Measured Thickness (Depth), Breslow's Measurement
Malignant Melanoma of Iris and Ciliary Body	CS Extension Iris
Malignant Melanoma of Choroid	Measured Thickness (Depth), Breslow's Measurement
Malignant Melanoma of Other Eye	Measured Thickness (Depth), Breslow's Measurement
Brain	WHO Grade
Thyroid	Solitary vs. Multifocal
Kaposi sarcoma	Associated with HIV/AIDS
Hodgkin Lymphoma and Non-Hodgkin Lymphoma	Systemic Symptoms at Diagnosis
Pleura	Pleural Effusion
Other CNS	WHO Grade
Other Endocrine	WHO Grade
Lymphoma	Associated with HIV/AIDS

Code 000 when there is a statement in the record that a test was not performed.

Code 999 if there is no report of a lab test in the patient record.

For Kaposi sarcoma, if AIDS status is not documented, use code 999 (Unknown), rather than 002 (Not Present).

Item 43. CS Site-Specific Factor 2

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Code 888 if there is no site/histology-specific factor for a schema.

The following primary sites use *Site-Specific Factor 2* to code information. See the site-specific schemas for acceptable codes and their definitions.

Site/Histology	Factor
Head and neck	Extracapsular Extension, Lymph Nodes for Head and Neck
Liver	Fibrosis Score
Malignant Melanoma of Skin, Vulva, Penis, Scrotum	Ulceration
Breast	Progesterone Receptor Assay (PRA)
Prostate	Prostatic Specific Antigen (PSA)
Testis	Human Chorionic Gonadotropin (HCG)
Hodgkin and non-Hodgkin Lymphoma	Symptoms at Diagnosis

Code 000 when there is a statement in the record that a test was not performed.

Code 999 if there is no report of a lab test in the health record.

For malignant melanoma of skin, if ulceration is not mentioned in the pathology report, code 000.

Item 44. CS Site-Specific Factor 3

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Code 888 if there is no site/histology-specific factor for a schema.

The following primary sites use *Site-Specific Factor 3* to code information. See the site-specific schemas for acceptable codes and their definitions.

Site/Histology	Factor
Head and Neck	Levels I-III, Lymph Nodes of Head and Neck
Malignant Melanoma of Skin, Vulva, Penis, Scrotum	Clinical Status of Lymph Node Mets
Breast	Number of Positive Ipsilateral Axillary Lymph Nodes
Prostate	CS Extension - Pathologic Extension
Testis	LDH (Lactate Dehydrogenase)
Lymphoma	International Prognostic Index (IPI) Score

Code 000 when there is a statement in the record that a test was not performed.

Code 999 if there is no report of a lab test in the health record.

For the lymphomas, if the IPI score is not stated in the record, code 999. It is not necessary to calculate the IPI score from other information in the record.

Item 45 CS Site-Specific Factor 4

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Code 888 if there is no site/histology-specific factor for a schema.

The following primary sites use *Site-Specific Factor 4* to code information. See the site-specific schemas for acceptable codes and their definitions.

Site/Histology	Factor
Head and Neck	Levels IV-V, Lymph Nodes of Head and Neck
Malignant Melanoma of Skin, Vulva,	

Penis, Scrotum
Breast
Prostate
Testis

Lactate Dehydrogenase (LDH)
Immunohistochemistry (IHC) of Reg Lymph Nodes
Prostate Apex Involvement**
Radical Orchiectomy Performed

** Prior to version 01.02.00, Prostatic Acid Phosphatase

Code 000 when there is a statement in the record that a test was not performed.

Code 999 if there is no report of a lab test in the health record.

Item 46. CS Site-Specific Factor 5

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Code 888 if there is no site/histology-specific factor for a schema.

The following primary sites use *Site-Specific Factor 5* to code information. See the site-specific schemas for acceptable codes and their definitions.

Site/Histology

Head and Neck
Breast
Prostate
Testis

Factor

Levels VI-VIII, Lymph Nodes of Head and Neck
Molecular Studies of Regional Lymph Nodes
Gleason Primary Pattern and Secondary Pattern Value
Size of Metastasis in Lymph Nodes

Code 000 when there is a statement in the record that a test was not performed.

Code 999 if there is no report of a lab test in the health record.

Item 47. CS Site-Specific Factor 6

Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 01.03.00 (CS Manual)* for additional information.

Download and print the manual from <http://www.cancerstaging.org/cstage/manuals.html>

Code 888 if there is no site/histology-specific factor for a schema.

The following primary sites use *Site-Specific Factor 6* to code information. See the site-specific schemas for acceptable codes and their definitions.

Site/Histology

Head and Neck

Breast
Prostate

Factor

Parapharyngeal, Parotid, Preauricular, and Sub-Occipital
Lymph Nodes, Lymph Nodes for Head and Neck
Size of Tumor--Invasive Component
Gleason Score

Code 000 when there is a statement in the record that a test was not performed.

Code 999 if there is no report of a lab test in the health record.

Item 48. Date First Therapy Initiated

Enter the month, day and year (mm/dd/yyyy) of the first cancer directed therapy.

Cancer directed therapy is defined as treatment that modifies, controls, removes or destroys proliferating cancer tissue.

If the physician decides NOT to treat the patient, record the date of this decision as the date first therapy initiated.

If the patient REFUSES treatment, record the date of this decision as the date first therapy initiated.

If the exact date of the beginning of treatment is not available, recording an approximate date is preferred.

Code “99/99/9999” ONLY when it is unknown if any treatment was given *or* the case was identified by death certificate only.

If not reporting, leave this item blank.

Item 49. Reason No Surgery

Enter the reason no cancer directed surgery was performed, on the primary site. Use the number that best describes why the primary site surgery was not performed.

The codes are as follows:

- | | | |
|---|---|--|
| 0 | = | Cancer directed surgery performed |
| 1 | = | Cancer directed surgery not recommended |
| 2 | = | Surgery contraindicated due to other conditions; includes autopsy only cases |
| 6 | = | Reason unknown for no cancer directed surgery |
| 7 | = | Patient or patient’s guardian refused cancer directed surgery |
| 8 | = | Cancer directed surgery recommended, unknown if performed |
| 9 | = | Unknown if cancer directed surgery recommended or performed; death certificate only case |

Hospitals reporting a patient that has not been admitted to the hospital nor evaluated for treatment and who is not receiving treatment within the facility may leave this item blank.

If not reporting, leave this item blank.

Item 50. First Course of Cancer Directed Therapy

Report the first course of cancer-directed therapy completed and those pending at the time of completing the cancer report form.

Indicate all therapies that are planned. This includes any surgery, radiation therapy, chemotherapy, hormone therapy or immunotherapy (biological response modifier therapy) that has been described as a recommended part of the treatment plan.

Cancer directed treatment is tumor directed and its purpose is to “modify, control, remove or destroy the primary or metastatic cancer tissue.”

First course of treatment is defined as “all treatment methods recorded in the treatment plan and administered to the patient before disease progression or recurrence.” No therapy can be interpreted as the first course of treatment, i.e.: the patient refused treatment, the family/guardian refused treatment, the patient expired before treatment started or the physician recommended no treatment.

The time period for first course of treatment as defined by the American College of Surgeons (ACoS) is “initial treatment must begin within four months of the date of initial diagnosis.”

The time period for first course of treatment as defined by the Surveillance Epidemiology & End Results (SEER) Program is defined as “if there is no documentation of a planned first course of treatment or standard of practice, first course of treatment includes all treatment before disease progression or treatment failure. If it is undocumented whether there is disease progression/treatment failure and the treatment in question begins more than one year after diagnosis, assume that the treatment is not part of first course.”

NOTE: The Michigan Cancer Surveillance Program accepts both time periods for the first course of treatment. If your facility has a cancer program accredited by the American College of Surgeons, then your facility must follow the four-month rule. For all other facilities, the first course of treatment can begin within four months or one year.

If not reporting this information, leave the item blank.

Item 51. Vital Status

Record the vital status of the patient as of the last contact in the box provided.

If vital status is not known, answer unknown.

Do not leave this item blank.

Item 52. If Deceased

If patient’s vital status is “0,” complete this item.

- 52a. Enter the two digit alphabetic postal abbreviation for the state of death.
52b. Enter the month, day and year (mm/dd/yyyy) of the patient's death.

Item 53. Facility

Enter the name of the hospital, laboratory or registry where the report is being prepared.

Do not leave this item blank.

Item 54. Abstractor Name

Enter the name of the person who prepared the cancer report form.

Do not leave this item blank.

Item 55. Abstractor Telephone Number

Enter the phone number of the person who prepared the cancer report form.

Do not leave this item blank.

Item 56. Date Abstracted

Enter the date the cancer report form was prepared.

Do not leave this item blank.

FOLLOW-UP WORK ON REPORTED CASES

Contact with the reporting entity concerning an individual cancer report or a specific patient will occur under four separate circumstances. As is consistent with administrative Rules; the cooperation of facility personnel in these four areas is essential. Should problems or concerns arise, please feel free to contact the office.

1. As cancer reports are received and processed, each will be reviewed for completeness, legibility and consistency. Contact with the reporting entity will occur to resolve identified problems in these areas as forms are initially processed and later as final processing occurs. Contacts will generally be by e-mail (if no patient identifiers) or phone. Prompt attention to such issues by the personnel responsible for completing these reports is important to smooth processing.
2. In assessing the quality of the cancer reports received from across the state, the office will contact hospitals, laboratories or registries for access to or copies of pertinent records. This activity is necessary to evaluate the quality and completeness of the information received from individual reporting entities and for the state cancer registry as a whole. Problems that are identified during such reviews will be addressed as necessary to maintain or improve data quality and usefulness.
3. Contact may also occur to conduct approved epidemiological research projects. When a research study is approved by the Director of the Michigan Department of Community Health, study subjects will be drawn from the state registry. Hospitals, laboratories and registries will be contacted concerning each case reported by them to ascertain the physician treating the patient. Through this process, physicians can then be contacted and patient consent obtained.
4. Death follow back study (also known as 'unlinked deaths') is part of the department's passive case finding system. The process of the death follow back study is basically as follows:
 - a. the previous years death file is reviewed for all death certificates that indicate some involvement of cancer
 - b. the cases that indicate involvement of cancer are then matched against the cancer registry
 - c. those decedents that do not match the cancer registry and indicate involvement of cancer are then pulled
 - d. these cases are reviewed to see if they appear to meet the reporting criteria
 - e. if after the review they appear to be unreported cancer cases are queried
 - f. unreported cases are either queried through the hospital where the patient died or through the certifying physician for follow up information
 - g. after receiving the follow up information a decision is made: either the case meets reporting criteria and a cancer report is filed or the case does not meet reporting criteria and is not added to the cancer registry

The death certificate information is a valuable tool in case finding. The types of cases that we have found are those that have not been definitively diagnosed, or cases that are not diagnosed until death occurred. Through the death follow back study we add cases yearly which helps to create a more complete state cancer registry.

REPORTABLE CONDITIONS

The first step in any case finding effort is to outline what is reportable. The administrative rules on cancer reporting provide the definition of a reportable cancer. All cases satisfying this definition are reportable. The residence of the patient is not a factor.

"Cancer" means all diagnoses with a behavior code of "2" (carcinoma in situ) or "3" (malignant primary site) as listed in the most recently amended International Classification of Diseases for Oncology, excluding basal, epithelial, papillary and squamous cell carcinomas of the skin, but including carcinomas of the skin prepuce, clitoris, vulva, labia, penis and scrotum.

Cases diagnosed on or after **January 1, 1985 to date** MUST be reported to the Michigan Cancer Surveillance Program ***within 180 days or six months from the date of initial diagnosis.***

Once a neoplasm has been identified, it is assigned a six digit morphology code (i.e. 8522/34) from the International Classification of Diseases for Oncology, Third Edition (ICD-O-3) coding book. The first four digits record the cell type or histology. The fifth digit, after the slash or solidus (/), is the behavior code and the sixth digit is the tumor grade. All neoplasms assigned a Fifth Digit Behavior Code of '2' or '3' in the ICD-O-3 are reportable.

Non-malignant primary intracranial and central nervous system tumors diagnosed on or after October 1, 2004 or later with a behavior code of '0' or '1' will be collected for the following site codes based on *The International Classification of Disease Oncology, Third Edition (ICD-O-3)*: meninges (C70.0 – C70.9); brain (C71.0 – C71.9); spinal cord, cranial nerves, and other parts of the central nervous system (C72.0 – C72.9); pituitary gland (C75.1); craniopharyngeal duct (C75.2); and pineal gland (C75.3).

Juvenile astrocytomas listed as 9421/1 in ICD-O-3 are required and should be recorded as 9421/3, thereby making it a reportable condition..

<i>ICD-O-3 Fifth Digit Behavior Codes for Neoplasms</i>			
<i>Behavior Code</i>	<i>Definition</i>	<i>Reportable</i>	<i>Non-Reportable</i>
/0	Benign EXCEPTION: Brain and CNS		X
/1	Uncertain whether benign or malignant Borderline malignancy Low malignant potential Uncertain malignant potential EXCEPTION: Brain and CNS		X
/2	Carcinoma In Situ Intraepithelial Noninfiltrating Noninvasive	X	

/3	Malignant, primary site	X	
/6*	Malignant, metastatic site Malignant, secondary site		X
/9*	Malignant, uncertain whether primary or metastatic site * Not used by cancer registries.		X

NOTE: Screening of diagnostic codes for behavior codes “6 - malignant, metastatic site,” and “9 - malignant, uncertain whether primary or metastatic site” is necessary for casefinding. If this is the first diagnosis of this cancer and even though it is the metastatic site, it is still a reportable condition. The first time a diagnosis of cancer is made with an “unknown primary” it should be reported as such. If the primary site is determined after further study and it was originally reported as an unknown primary, a correction **MUST** be reported.

Benign Brain and CNS

For benign/borderline intracranial and central nervous system tumors, the terms ‘tumor’ and ‘neoplasm’ are considered diagnostic for the purpose of case reporting, in addition to the terms generally applicable to malignant tumors.

If the final pathologic diagnosis is ‘CNS neoplasm’ or ‘mass,’ there must be an ICD-O-3 code for the mass or neoplasm. If there is not an ICD-O-3 code, the case is **NOT** reportable.

Diagnoses like ‘hypodense mass’ or ‘cystic neoplasm’ are **NOT** reportable even for CNS sites.

If the **ONLY** diagnosis available is ‘CNS tumor’ or ‘neoplasm’ the case is reportable and the histology is coded as M-8000/1 (Neoplasm, NOS, uncertain whether benign or malignant.)

Reportable Histologies

Craniopharyngioma (M9350)
Rathke Pouch Tumor (M9350)
Chordomas (M9370)
Schwannoma (M9560)
Acoustic Schwannoma/Neuroma
Dermoid Cyst (M9084)
Granular Cell Tumor (M9580)
Embryonal Tumors
Retinoblastoma (M9510)
Primitive Neuroectodermal Tumors (PNET)
Lymphoma
Vascular Tumors (arise from blood vessels of brain and spinal cord)
Hemangioblastoma (M9161)

Non-Reportable Histologies

Rathke Cleft Cyst
 Epidermoid Cyst
 Colloid cyst
 Enterogenous Cyst
 Neuroglial Cyst
 Plasma Cell Granuloma
 Nasal Glial Heterotopia

The following conditions are considered reportable and MUST be reported to the Michigan Cancer Surveillance Program.

<i>Reportable Conditions</i>			
<i>ICD-9-CM Code</i>	<i>Primary Site</i>	<i>Histology Code</i>	<i>Topography Code</i>
230.5	AIN III (anal intraepithelial neoplasia)	8077/2	C21.1
233.1	CIN III (cervical intraepithelial neoplasia) with or without carcinoma in situ (CIS) (NOTE: A diagnosis of “CIN III, severe dysplasia” is NOT reportable.)	8077/2	C53.0 - C53.9
233.1	HSIL (high-grade squamous intraepithelial lesion) with or without carcinoma in situ (CIS) (NOTE: A diagnosis of “HSIL, moderate dysplasia or severe dysplasia” is NOT reportable.)	8077/2	C53.0 - C53.9
191.0 - 191.9	Juvenile astrocytoma Pilocytic astrocytoma Piloid astrocytoma	9421/1 9421/3	C71.1 - C71.9
233.3	VAIN III (vaginal intraepithelial neoplasia) with or without carcinoma in situ (CIS) (NOTE: A diagnosis of “VAIN III, severe dysplasia” is NOT reportable.)	8077/2	C52.0 - C52.9
233.3	VIN III (vulvar intraepithelial neoplasia) with or without carcinoma in situ (CIS) (NOTE: A diagnosis of “VIN III, severe dysplasia” is NOT reportable.)	8077/2	C51.0 - C51.9

Exclusions to Reportable Conditions

The Michigan Cancer Surveillance Program has exclusions to the collection of skin malignancies based upon the primary site and histology. If the following histologies arise in the skin (C44.0 - C44.9) they are NOT reportable regardless of the stage at the initial time of diagnosis. All other histologies of the skin are reportable, i.e.: melanoma, Kaposi sarcoma, mycosis fungoides, cutaneous lymphomas, etc.

<u>Description</u>	<u>Histology Codes</u>
Malignant Neoplasm (Carcinoma), NOS of the skin	8000 - 8004
Epithelial Neoplasms (Carcinoma), NOS of the skin	8010 - 8045
Papillary and Squamous Cell Neoplasm (Carcinoma) of the skin	8050 - 8082
Basal Cell Neoplasm (Carcinoma) of the skin	8090 - 8110

EXCEPTION: The above histologies **MUST** be reported if the primary site is the skin of the male and female genital sites. To determine whether a diagnosis of skin “cancer” is reportable based upon the above histologies, refer to the table below.

Reportable vs Non-Reportable Conditions of the Skin				
ICD-9-CM Code	Primary Site	Topography Code	Reportable	Non-Reportable
184.1	Skin of Labia Majora	C51.0 - C51.1	X	
184.3	Skin of Clitoris	C51.2	X	
184.4	Skin of Vulva	C51.9	X	
187.1	Skin of Prepuce	C60.0	X	
187.4	Skin of Penis	C60.9	X	
187.7	Skin of Scrotum	C63.2	X	
173.0	Skin of Lip	C44.0		X
173.1	Skin of Eyelid	C44.1		X
173.1	Skin of Other Unspecified Parts of Face	C44.3		X
173.2	Skin of External Ear	C44.2		X
173.4	Skin of Scalp and Neck	C44.4		X
173.5	Skin of Anus	C44.5		X
173.5	Skin of Trunk	C44.5		X
173.6	Skin of Upper Limb and Shoulder	C44.6		X
173.7	Skin of Lower Limb and Hip	C44.7		X

173.8	Skin, Overlapping Lesion	C44.8		X
173.9	Skin, NOS	C44.9		X

The following conditions are NOT reportable to the Michigan Cancer Surveillance Program.

<i>Non-Reportable Conditions</i>			
<i>ICD-9-CM Code</i>	<i>Primary Site</i>	<i>Histology Code</i>	<i>Topography Code</i>
622.1	CIN I (cervical intraepithelial neoplasia) with or without mild dysplasia	8077/0	C53.0 - C53.9
622.1	CIN II (cervical intraepithelial neoplasia) with or without moderate dysplasia	8077/0	C53.0 - C53.9
622.1	LSIL (low-grade squamous intraepithelial lesion) with or without mild dysplasia	8077/0	C53.0 - C53.9
623.8	VAIN I (vaginal intraepithelial neoplasia) with or without mild dysplasia	8077/0	C52.9
623.8	VAIN II (vaginal intraepithelial neoplasia) with or without moderate dysplasia	8077/0	C52.9
624.8	VIN I (vulvar intraepithelial neoplasia) with or without mild dysplasia	8077/0	C51.0 - C51.9
624.8	VIN II (vulvar intraepithelial neoplasia) with or without moderate dysplasia	8077/0	C51.0 - C51.9

Case Scenarios

The following scenarios and definitions are to assist with determining whether or not the patient has a reportable condition.

Reportable Case Scenarios

1. If a lesion is originally assigned a behavior code of '0 - benign' or '1 - uncertain' and is later assigned a behavior code of '2 - in situ' or '3 - malignant' by the *pathologist*, the case is reportable.
2. If a lesion is originally assigned a behavior code of '0 - benign' or '1 - uncertain' and is later assigned a behavior code of '2 - in situ' or '3 - malignant' by the *managing physician*, the case is reportable.
3. If a specimen is sent to your facility from a staff physician's office and read by your pathologist (i.e. pap smear, stereotatic needle biopsy for a breast mass, or excisional biopsy for a suspicious skin lesion) the case is to be reported.

4. An incidental finding of a malignancy at the time of an autopsy, with no suspicion of cancer prior to death, must be reported.
5. All malignant histologically confirmed specimens identified by your facility, i.e. tissue specimens from biopsy, frozen section, surgery, autopsy, or dilation and curettage (D&C); bone marrow biopsy,

one marrow aspiration; hematologic confirmation of leukemia (peripheral blood smear); loop electrocautery excision procedure (LEEP) done in GYN office.
6. All malignant cytologically confirmed specimens identified by your facility, i.e. breast secretion, bronchial brushing, bronchial washings, cervical smear (pap smear), fine needle aspirate (FNA), gastric fluid, peritoneal fluid, pleural fluid, prostatic secretions, spinal fluid, sputum smears, tracheal washings, urinary sediment, vaginal smears.
7. A patient is diagnosed with a malignancy as an inpatient or outpatient, based upon a clinical or non-microscopic diagnosis where the findings represent a malignancy that is described as probable, presumed, suspected, most likely, consistent with, compatible with, or imposing upon.
8. Patient is diagnosed in a staff physician's office and treated at your facility.
9. Patient is diagnosed at your facility and treated elsewhere, whether by referral or by choice.
10. Patient is diagnosed at your facility and receives all or part of his/her treatment at your facility.
11. Patient is diagnosed at your facility and refuses therapy.
12. Patient is diagnosed at your facility and the family/guardian refuses therapy.
13. Patient is diagnosed at your facility and is untreatable due to age, advanced disease or other medical conditions.
14. Patient is diagnosed at your facility and specific therapy was recommended but not received at your facility or unknown if administered.
15. Patient was diagnosed elsewhere, but received all or part of his/her treatment at your facility.
16. Patient is diagnosed at your facility but unknown if therapy was recommended or administered.
17. Patient was diagnosed by death certificate only.
18. Patient receives all or part of the first course of therapy for a malignancy, regardless of where they were first diagnosed.
19. Patient is a non-resident of Michigan and is receiving treatment at your facility.
20. Patient is a Michigan resident diagnosed out of state but receiving treatment at your facility.

21. Patient is a Michigan resident diagnosed and treated out of state, i.e. The patient is diagnosed and treated in Wisconsin for breast cancer, but is admitted to the cardiac care unit at your facility. You recognize that the patient has breast cancer and is receiving their first course of treatment in Wisconsin. The patient is a Michigan resident, therefore the case is reportable.

Non-Reportable Case Scenarios

1. Precancerous or benign conditions (except benign or borderline intracranial CNS tumors).
2. Patients seen only in consultation to establish or confirm a diagnosis of cancer or treatment plan when the patient was first seen in a known Michigan facility.
3. Patient is diagnosed with a recurrence or progression of a previously diagnosed malignancy.
4. The patient's malignancy was originally diagnosed prior to January 1, 1985.
5. Patient receives a radiographic exam (MRI, X-ray, CT) which reveals an ill-defined "mass." If the patient does NOT return to your facility for diagnostic confirmation or treatment of cancer, the case is not reportable. For example: an outpatient CT scan of the pelvis reads, probable carcinoma of the right kidney. The patient did not return to your facility for diagnostic confirmation or treatment; therefore the case is not reportable.

NOTE: In order for a "radiographic diagnosis" to be reportable, the patient's primary care physician MUST state in the medical record that the patient has cancer and treatment has been decided upon. Keep in mind, that refusal of treatment and the decision not to treat is still classified as treatment and the case is to be reported.

6. Patient has a diagnosis made as an inpatient or outpatient based upon clinical or non-microscopic findings that are described as equivocal, questionable, possible or worrisome.
7. Patient visits your facility for blood work (lab only) and is NOT admitted for treatment, i.e. blood drawn to monitor anemia for patients receiving chemotherapy elsewhere; blood drawn to monitor PSA levels for prostate cancer.
8. Patient has an active malignancy but is admitted to your facility for an unrelated medical condition and does not receive first course of treatment for their cancer.
9. Patient is admitted to your facility with an active malignancy and receives supportive or palliative care, i.e. gastrostomy tubes for enteral nutrition, if previously reported or diagnosed/treated through another Michigan hospital.
10. Patients with a history of cancer who are clinically free of disease.
11. Patients admitted for terminal supportive care, including home care services, if previously reported or diagnosed/treated through another Michigan hospital.
12. Patients admitted to a designated hospice, if previously reported or diagnosed/treated through

- another Michigan hospital.
13. Patient's specimen slides are sent to your pathologist for a second opinion.
 14. Patients with skin cancer that does NOT meet the histology and site requirements listed previously.

Facility Specific Case Scenario

Your facility may receive specimens from a separate facility that are read by your pathologist due to the facility not having a pathologist or a laboratory. Once the specimen is read, the final report and specimen(s) are sent back to the original facility. You may or may not be responsible for reporting the ones that are malignancies. A verbal or written contract between the two facilities must exist that designates which facility will be responsible for reporting these cases to the Michigan Cancer Surveillance Program. If an agreement does NOT exist, BOTH facilities are expected to report each case.

AMBIGUOUS TERMINOLOGY

Determination of the cancer stage is both a subjective and objective assessment of how far the cancer has spread. Sometimes the clinician is hesitant to commit to a definite statement that a particular organ or tissue is involved by the cancer and uses what data collectors refer to as ambiguous terminology. The following lists can generally be used to interpret the intent of the clinician; however, if individual clinicians use these terms differently, the clinician's definitions and choice of therapy should be recognized. If a term used in a diagnostic statement is not listed below, consult the clinician to determine the intent of the statement.

The following terms ARE to be considered a *diagnosis of cancer or interpreted as evidence* of tumor involvement when determining the stage of disease.

Adherent	Neoplasm*** (beginning with 2004
Apparent(ly)	diagnoses and only for C70.0-C72.9,
Appears to	C75.1-C75.3)
Comparable with	Onto *
Compatible with	Overstep
Consistent with	Presumed
Contiguous	Probable
Continuous with	Protruding into (unless encapsulated)
Encroaching upon *	Suspect(ed)
Extension to	Suspicious
Extension into	To *
Extension onto	Tumor*** (beginning with 2004
Extension out onto	diagnoses and only for C70.0-C72.9,
Features of	C75.1-C75.3) Up to
Fixation to another structure **	
Fixed **	EXCEPTION: If a cytology is reported as
Impending perforation of	“ <i>suspicious</i> ,” do NOT interpret it as a diagnosis
Impinging upon	of cancer. Abstract the case ONLY if a positive
Impose on	biopsy or a physician's clinical impression of
Imposing on	cancer supports the cytology findings.
Incipient invasion	
Induration	* interpreted as involvement whether the
Infringe	description is clinical, operative or pathological
Infringing	
Into *	** interpreted as involvement of another organ
Intrude	or tissue
Invasion to into	
Invasion onto	***additional terms for non-malignant primary
Invasion out onto	intracranial and central nervous system tumors
Most likely	only

The following terms **ARE NOT** to be considered a diagnosis of cancer *or* interpreted as evidence of

tumor involvement when determining the stage of disease.

Abuts	Extension to without invasion
Approaching	Extension to without involvement of
Approximates	Kiss/kissing
Attached	Matted (except for lymph nodes)
Cannot be excluded	Possible
Cannot be ruled out	Questionable
Efface/effacing/effacement	Reaching
Encased	Rule out
Encasing	Suggests
Encompass(ed)	Very close to
Entrapped	Worrisome
Equivocal	

Ambiguous terms may originate from any source document, such as pathology report, radiology report, or from a clinical report. The terms listed below are grouped by reportable and not reportable

Ambiguous terms that are reportable (used to determine reportability)

- Apparent(ly)
- Appears (effective with cases diagnosed 1/1/1998 and later)
- Comparable with (effective with cases diagnosed 1/1/1998 and later)
- Compatible with (effective with cases diagnosed 1/1/1998 and later)
- Consistent with
- Favor(s)
- Malignant appearing (effective with cases diagnosed 1/1/1998 and later)
- Most likely
- Presumed
- Probable
- Suspect(ed)
- Suspicious (for)
- Typical (of)

Ambiguous terms that are NOT reportable (Do not accession cases with a diagnosis based on **only these terms**)

- Cannot be ruled out
- Equivocal
- Possible
- Potentially malignant
- Questionable
- Rule(d) out
- Suggests
- Worrisome

In an instance where the diagnosis cannot be found in the ICD-O-3 manual, but appears to be an in situ or invasive condition, it is best to report the case or to contact the office for advice.

CASEFINDING PROCEDURES

Casefinding is a systematic process used to identify all cases eligible to be included in the central cancer registry. Cases include those patients that were diagnosed and/or treated with a reportable condition in your facility.

One source for casefinding is NOT enough to identify all cancer cases diagnosed or treated at your facility and multiple sources MUST be used to obtain a complete description of each patient's course of cancer care.

Each facility should have written procedures and instructions for carrying out complete casefinding. This will ensure that casefinding is performed on a regular basis and allow personnel to know the status of casefinding at all times. A written log or tracking system should be in place to monitor all casefinding sources. (Casefinding sources may be monitored daily, weekly, monthly or quarterly. A sample Casefinding Completeness Log is located on the following pages and can be further customized to meet each facility's needs.)

Having a system for recognizing reportable conditions is essential to complete reporting. A process which will identify all cancer cases that are diagnosed or treated within a facility must be devised. All pertinent medical records which may contain information on any case of diagnosed cancer must be reviewed, whether that diagnosis is clinical or histological. The hospital where a diagnosis is reached or a patient is treated must endeavor to report all cases regardless of the patient's status. This includes outpatients and patients diagnosed elsewhere when the place of diagnosis is unknown or is outside the state. An independent laboratory must similarly ascertain needed information upon determining that a reportable condition exists. It is important to report all patients, including patients who do not live in Michigan.

Patients who were diagnosed elsewhere and newly admitted to your facility for further treatment, are to be reported provided the first diagnosis occurred after the start date of the state registry on January 1, 1985. This may result in multiple reports on one patient, but it will enable the MCSP to have the most comprehensive data on each case and serves as a quality control mechanism.

Reports are necessary for outpatients who are diagnosed as having cancer based upon a laboratory diagnosis of submitted specimens as well as those cases where outpatient surgery is the only means of diagnosis. Outpatients initially treated for cancer who were not diagnosed within a facility should also be reported if receiving outpatient radiotherapy or chemotherapy.

A report is not required when initially treating a patient diagnosed elsewhere **if it is known that the patient was first diagnosed and treated in some other Michigan hospital, and you have the name of the diagnosing hospital in the medical record.** Patients that have been diagnosed out of state e.g. Mayo Clinic or in an unknown facility, who come to your facility for treatment must be reported. This requirement includes the reporting of "historic" cases that otherwise meet the definition of a reportable case.

In many facilities, these functions and/or record systems are coordinated which can greatly simplify the process of case finding. What is important is that all sources of information pertinent to case identification be reviewed. The development of a coordinated screening of these various files is essential to assuring complete reporting.

A second report is not necessary upon confirmation or re-diagnosis of a specific primary tumor or the metastasis therefrom, if that specific primary is known to have been reported earlier. Send a second report only if the information first reported on the patient requires correction or can be reported more completely than previously known.

It is very important to report all cases regardless of state residency. Data on all cancer cases is of value in several ways. In particular, Michigan currently has resident data exchange agreements with several states concerning cancer cases diagnosed and/or treated within our respective borders. Michigan sends reports of nonresident patients to their state of residency and these states reciprocate by sending MCSP records of MI residents diagnosed or treated for cancer in their state..

When in doubt about submitting a cancer case to the Michigan Cancer Surveillance Program (MCSP), ask these two questions:

1. Does the patient have a diagnosis of cancer that is reportable?
2. Was the case diagnosed since the start date of the central registry 1-1-85?

If the answer is yes to both of these questions and the case has not yet been submitted by your hospital, report the case.

If you have questions about a particular case, submit the case with an attached note of explanation or call the state registry.

A record of those cases submitted to the central state registry **MUST** be maintained. It is recommended for those facilities that submit manually, to make a copy of the completed cancer report, submit the original form to the state central cancer registry and file the copy alphabetically by last name combining all diagnosis years. For those facilities that submit electronically, a list of cases submitted to the state central cancer registry can easily be generated.

The MCSP recommends retaining copies of the cancer report forms or submission log for a period of **three full years**. Legislation indicates that an audit may be conducted “not more than once every two years for the purpose of assessing the quality and completeness of cancer reporting.” During the audit process, the MDI and submission logs are reviewed. As a result, maintaining these records for a period of three years, will be useful during the audit process.

If a submission log is maintained, it should contain at a minimum, the following items: patient’s full name, medical record number, social security number, date of birth, date of diagnosis, primary site, laterality and summary stage. The submission log is not necessarily the best mechanism for keeping track of those cases submitted to the MCSP, but those facilities that wish to maintain a log are free to do so.

Examples and definitions of sources for case finding are as follows:

1. Pathology Reports

Review ALL pathology reports from the pathology department for reportable conditions on a weekly, monthly or quarterly basis.

If the final pathologic diagnosis is ‘CNS neoplasm’ or ‘mass,’ there must be an ICD-O-3 code for the

mass or neoplasm. If there is not an ICD-O-3 code, the case is NOT reportable.

If the ONLY diagnosis available is ‘CNS tumor’ or ‘neoplasm’ the case is reportable and the histology is coded as M-8000/1 (Neoplasm, NOS, uncertain whether benign or malignant.)

2. Cytology Reports

Review ALL cytology reports from the pathology department for reportable conditions on a weekly, monthly or quarterly basis.

3. Bone Marrow Reports

Review ALL bone marrow reports from the pathology department for reportable conditions on a weekly, monthly or quarterly basis.

4. Autopsy Reports

Review ALL autopsy reports from the pathology department at least twice a year. Review all diagnoses recorded, not just the cause of death, as occult or unexpected malignancies can be found on autopsy reports. If your facility does not perform autopsies, these reports may be located in the health information department.

5. Medical Oncology Logs (Chemotherapy)

Chemotherapy is administered either as an inpatient, outpatient, in a free-standing facility or a physician’s office. Develop a system for identifying patients who receive chemotherapy at any facility affiliated with the reporting institution. Review the list of patients on a monthly or quarterly basis. i.e. billing, summary sheet, appointment book, treatment record.

6. Radiation Oncology Logs

Radiation therapy is administered either as an inpatient, outpatient or in a free-standing facility. Develop a system for identifying patients who receive radiation therapy at any facility affiliated with the reporting institution. Review the list of patients on a monthly or quarterly basis. i.e. billing, summary sheet, appointment book, treatment record.

7. Radiology

For benign/borderline intracranial and central nervous system tumors, the terms ‘tumor’ and ‘neoplasm’ are considered diagnostic for the purpose of case reporting, in addition to the terms generally applicable to malignant tumors.

Diagnoses like ‘hypodense mass’ or ‘cystic neoplasm’ are NOT reportable even for CNS sites.

8. Master Disease Index (MDI)

Generate a MDI on monthly or quarterly basis by discharge date which is based upon the diagnosis year. Use the ICD-9-CM codes on the following pages to generate the MDI.

Select those patients seen at your facility as an inpatient and/or as an outpatient for surgery, endoscopy, chemotherapy, radiation therapy, etc. (*Exclude laboratory and radiology visits.*)

List the principle code, primary code and secondary codes to include up to *six* diagnostic codes that have been assigned.

The MDI should include the following items: last name, first name, middle initial, date of birth, social

security number, medical record number, laboratory number (if applicable), admit date, discharge date, patient type, ICD-9-CM code and description.

Sort the MDI ***alphabetically*** by last name. This will make it easier when comparing the MDI to previously submitted cases.

Once the MDI has been generated, it must be compared with the log (or copies) of previously submitted cases.

If the name from the MDI appears on the log of previously submitted cases, determine whether this is a new primary, recurrence or progression of disease from the original primary.

- a. A separate report **MUST** be submitted for each NEW primary.
- b. Additional reports for recurrence or progression of disease are **NOT** required.

If the name from the MDI does **NOT** appear on the log of previously submitted cases, determine whether this a NEW case, MISSED case or NON-REPORTABLE CONDITION.

- a. A separate report **MUST** be submitted for a new or missed case.
- b. If a non-reportable condition exists, document on the MDI next to the patient's name the condition that was determined to be non-reportable. This will be helpful when reviewing future MDI's.

Examples John Doe - NR SCC skin (non-reportable squamous cell carcinoma)
 James Doe - NR recurrent bladder cancer

Based upon your facility's needs, it may be beneficial to maintain a separate log of those cases determined to be non-reportable. This can easily be achieved by completing the demographic information only on the cancer report form and documenting the non-reportable condition in Data Item 25. The report form can be filed in a separate location alphabetically by last name, combining all years.

The MCSP recommends retaining the MDI log for a period of ***three full years***. Legislation indicates that an audit may be conducted "not more than once every two years for the purpose of assessing the quality and completeness of cancer reporting." During the audit process, the MDI and submission logs are reviewed. As a result, maintaining these records for a period of three years, will be useful during the audit.

<i>Casefinding List for Malignant Conditions</i>		
<i>ICD-9-CM Code</i>	<i>Diagnosis</i>	<i>Histology Code</i>
140 - 208.9	Malignant Neoplasms	8000/3 - 9989/3
230 - 234.9	Carcinoma In Situ	8000/2 - 9989/2
238.4	Polycythemia Vera Polycythemia rubra vera Proliferative polycythemia	9950/3

<i>Casefinding List for Malignant Conditions</i>		
<i>ICD-9-CM Code</i>	<i>Diagnosis</i>	<i>Histology Code</i>
238.6	Plasmacytoma, NOS Plasmacytoma of bone Plasma cell tumor Solitary myeloma Solitary plasmacytoma	9731/3
238.6	Plasmacytoma, Extramedullary (not occurring in the bone)	9734/3
238.7	Chronic Myeloproliferative Disease, NOS Chronic myeloproliferative disorder	9960/3
238.7	Myelosclerosis with Myeloid Metaplasia Myelofibrosis as a result of myeloproliferative disease Chronic idiopathic myelofibrosis Agnogenic myeloid metaplasia Megakaryocytic myelosclerosis Myelofibrosis with myeloid metaplasia	9961/3
238.7	Essential Thrombocythemia Idiopathic thrombocythemia Essential hemorrhagic thrombocythemia Idiopathic hemorrhagic thrombocythemia	9962/3
238.7	Refractory Cytopenia with Multi-lineage Dysplasia	9985/3
238.7	Myelodysplastic Syndrome with 5q Deletion (5q-) Syndrome	9986/3
238.7	Therapy-related Myelodysplastic Syndrome, NOS Therapy-related myelodysplastic syndrome, alkylating agent related Therapy-related myelodysplastic syndrome, epipodophyllotoxin-related	9987/3
238.7	Myelodysplastic Syndrome, NOS	9989/3
273.2	Heavy Chain Disease, NOS Alpha heavy chain disease Mu heavy chain disease Gamma heavy chain disease Franklin disease	9762/3
273.3	Waldenstrom's Macroglobulinemia (C42.0)	9761/3
273.9	Unspecified disorder of plasma protein metabolism (screen for potential 273.3 mis-codes)	

<i>Casefinding List for Malignant Conditions</i>		
<i>ICD-9-CM Code</i>	<i>Diagnosis</i>	<i>Histology Code</i>
284.9	Aplastic Anemia Refractory anemia without sideroblasts	9980/3
285.0	Sideroblasts Anemia Refractory anemia with ringed sideroblasts RARS	9982/3
285.0	Refractory Anemia with Excess Blasts RAEB RAEB I RAEB II	9983/3
285.0	Refractory Anemia with Excess Blasts in Transformation RAEB-T	9984/3
288.3	Hypereosinophilic Syndrome Chronic eosinophilic leukemia	9964/3
289.8	Acute Panmyelosis with Myelofibrosis (C42.1) Acute panmyelosis, NOS Acute myelofibrosis Acute myelosclerosis, NOS	9931/3

BENIGN BRAIN

Due to a change in the federal law affected by passage of Public Law 107-260, which requires the collection of case information for benign brain and CNS tumors, revisions to the administrative rules that govern Michigan cancer reporting have been made. Reporting of benign brain and CNS related tumors is now required. This new requirement is effective with cases diagnosed on October 1, 2004 forward.

Any tumor diagnosed October 1, 2004 or later with a behavior code of '0' or '1' will be collected for the following site codes based on *The International Classification of Disease Oncology, Third Edition (ICD-O-3)*: meninges (C70.0 – C70.9); brain (C71.0 – C71.9); spinal cord, cranial nerves, and other parts of the central nervous system (C72.0 – C72.9); pituitary gland (C75.1); craniopharyngeal duct (C75.2); and pineal gland (C75.3).

Histology codes are to be based on ICD-O-3.

Juvenile astrocytomas should continue to be reported as 9421/3.

Casefinding List for Benign/Borderline Intracranial and CNS Tumors		
ICD-9-CM	ICD-O-3	Description
225.2, 237.6	C70.0	Cerebral Meninges

Casefinding List for Benign/Borderline Intracranial and CNS Tumors		
ICD-9-CM	ICD-O-3	Description
225.2, 237.6	C70.1	Spinal Meninges
225.2, 237.6	C70.9	Meninges, NOS
225.0, 237.5	C71.0	Cerebrum
225.0, 237.5	C71.1	Frontal Lobe
225.0, 237.5	C71.2	Temporal Lobe
225.0, 237.5	C71.3	Parietal Lobe
225.0, 237.5	C71.4	Occipital Lobe
225.0, 237.5	C71.5	Ventricle, NOS
225.0, 237.5	C71.6	Cerebellum, NOS
225.0, 237.5	C71.7	Brain Stem
225.0, 237.5	C71.8	Overlapping Lesion of Brain
225.0, 237.5	C71.9	Brain, NOS
225.3, 237.5	C72.0	Spinal Cord
225.3, 237.5	C72.1	Cauda Equina
225.1, 237.9	C72.2	Olfactory Nerve
225.1, 237.9	C72.3	Optic Nerve
225.1, 237.9	C72.4	Acoustic Nerve
225.1, 237.9	C72.5	Cranial Nerve, NOS
225.8	C72.8	Overlapping Lesion of Brain and CNS
225.8, 225.9	C72.9	Nervous System, NOS
227.3, 237.0	C75.1	Pituitary Gland
227.3, 237.0	C75.2	Craniopharyngeal Duct
227.4, 237.1	C75.3	Pineal Gland

COMPONENTS OF GOOD REPORTING

Quality control field projects carried out within Michigan have been designed to measure the completeness and accuracy of the cancer data as well as timeliness of reporting. The results indicated the following quality control problems that need to be addressed if a facility is to satisfy the obligation to report all cancer cases. These issues are identified separately with recommendations that would help avoid reporting problems. The topics are discussed below and are divided into those that affect case finding and those that affect the accuracy of reports.

CASE FINDING PROBLEMS

1. Completeness

Reporting responsibility placed solely in the pathology department results in cases being missed that are diagnosed through other means. This especially pertains to cases involving the primary sites of the trachea, bronchus, pancreas, brain or lung and chronic leukemias/lymphomas.

In hospitals with no tumor registry there needs to be an established procedure that insures all cases are reported. These procedures must **include every department in the hospital which deals with cancer patients**. A procedure for reporting should be in place within all departments involved in either diagnosing or treating cancer patients. One approach is to develop a communication system between each department and the group coordinating reporting, placing one person in charge of reporting across all departments. Training staff within each area to follow coordinated procedures will eliminate missing cases. This should be covered within the written procedures on reporting in place within each facility.

2. Registries in Transition

Hospital cancer registries changing from manual reporting to a software system, or updating to a new software system, tend to have more missing cases. The registry staff while learning the new software system abstracts into the hospital registry while continuing to report manually this can be confusing and can result in cases that need to be sent to the state registry being overlooked.

During a transition stage **a procedure needs to be developed which will ensure all cases are properly reported**. One approach is to maintain a log of reported cases, or some type of recording system, to allow comparison between the cases in the hospital registry and those cases sent to the central registry. The log needs to be updated and checked on a monthly basis through this transition period.

3. Class of Case

All approved hospital registries classify cases as analytical or non-analytical. Sometimes registries mistakenly send only the analytical cases. Completeness of reporting is improved by registries being sure they are sending **all cancer patient data regardless of class of case**. Though this may result in duplication, it is the best way to ensure that all cases are reported to the state and none are skipped due to confusion on a patient's status. The MCSP accepts all cases regardless of their class of case status.

4. Reporting Outpatient Cases

Outpatient cases can be overlooked by reporting facilities due to a lack of communication and lack of a reliable reporting system within the facility. It is important to establish a referral procedure that will identify and prompt the reporting of **all outpatient cancer cases which are diagnosed or treated in your facility, clinics operated by your facility or through an affiliated laboratory.**

Reporting personnel should set up a reporting system with personnel having access to outpatient records relative to outpatient treatment and outpatient diagnosis. It is important to include diagnostic work for specimens submitted to the laboratory in this process. Outpatient cancer case information can be reported independently or, preferably, routed to the personnel responsible for all cancer case reporting. This should be done on a regular basis, i.e. weekly or daily depending upon the size of the hospital, to insure timeliness of reporting and to avoid backlogs.

5. Reporting Michigan Residents Diagnosed Out of State

Michigan residents diagnosed out of state but receiving treatment in a Michigan hospital can mistakenly not be reported. If a patient has been diagnosed out of state it is important to report the case in all instances. (Michigan does have an exchange agreement with some states to exchange data concerning cancer cases of Michigan residents, but not with all states.) These cases must be reported regardless of the state of diagnosis. **Report all cases treated in your facility that were diagnosed outside Michigan or in an unknown facility.**

6. Reporting Non-residents

Out of state residents are reportable. Non-resident cases cannot be skipped due to a presumption that only resident cases are necessary. All cancer cases are required to be reported regardless of residency.

Report all cases regardless of the patient's address or state of residency.

7. Referrals to Another Facility

Cases can be missed if there is a lack of communication between facilities. Especially in instances where a patient was diagnosed at one facility and then referred to a second facility for treatment and each facility assumed that the other had reported the case. The end result was often that neither had reported this case.

In a situation where hospitals are referring patients, it is recommended that the diagnosing facility and the hospital initially treating the patient **both** report the case. This recommendation applies to clinically diagnosed cases, in particular.

PRIMARY ANATOMICAL SITE

Record the primary anatomical site where the cancer began or originated

The primary site can be located on the pathology report, attestation statement, discharge summary, surgical report or scans.

Examples Bilateral mammogram impression: Development of a 1cm irregularly marginated and slightly spiculated mass in the upper outer quadrant of the right breast, surgical consultation recommended.
Right breast mastectomy: “Infiltrating moderately differentiated ductal cell carcinoma.”
Record the primary site as reported in the mammogram as “breast, UOQ (C50.4).”

Operative report, right colectomy: Gross description revealed a tan-pink mass 2.5cm in size located at approximately 52cm, in the sigmoid.
Right colectomy: “Infiltrating poorly differentiated mucinous producing adenocarcinoma.”
Record the primary site as reported in the operative report as “sigmoid colon (C18.7)” or “colon, 52cm.”

If the primary site cannot be determined record/code the primary site as “unknown primary site (C80.9).”
Do **NOT** report the metastatic site as the primary site.

Examples Fine needle aspiration (FNA) of the liver: “Metastatic adenocarcinoma, possible primary sites to consider include the colon, breast and lung.”
Discharge summary: Liver consistent with metastatic adenocarcinoma, primary site not determined.
Record the primary site as “unknown primary site (C80.9).”

Left upper lobe bronchoscopy: “Metastatic adenocarcinoma, consistent with breast primary.” Subsequently a bilateral mammogram was performed and revealed a poorly defined lesion in the lower outer quadrant of the left breast, suspicious for malignancy.
Discharge summary: Metastatic adenocarcinoma of the lung, consistent with breast primary.
Record the primary site as “breast, LOQ (C50.5).”

It is important to be as specific as possible when recording the primary site. Many organs can be sub-divided into specific segments.

Example The pathology report indicates adenocarcinoma of the left upper lobe, lung.
Record the primary site as “lung, upper lobe (C34.1).”

When recording the primary site, following are examples of sites to be sub-divided. (These are not all the primary sites that can be sub-divided - just a few.)

1. Breast

- Nipple (areola) (C50.0)
- Central portion (subareolar, retroareolar) (C50.1)
- Axillary tail (C50.6)
- Inner/outer/lower/upper breast, midline (overlapping lesion) (C50.8)

Right Side

- Upper-inner quadrant (UIQ) (C50.2)
(12:00 o'clock to 3:00 o'clock)
- Lower-inner quadrant (LIQ) (C50.3)
(3:00 o'clock to 6:00 o'clock)
- Upper-outer quadrant (UOQ) (C50.4)
(9:00 o'clock to 12:00 o'clock)
- Lower-outer quadrant (LOQ) (C50.5)
(6:00 o'clock to 9:00 o'clock)

Left Side

- Upper-inner quadrant (UIQ) (C50.2)
(9:00 o'clock to 12:00 o'clock)
- Lower-inner quadrant (LIQ) (C50.3)
(6:00 o'clock to 9:00 o'clock)
- Upper-outer quadrant (UOQ) (C50.4)
(12:00 o'clock to 3:00 o'clock)
- Lower-outer quadrant (LOQ) (C50.5)
(3:00 o'clock to 6:00 o'clock)

NOTE 1: If the pathology report indicates that the mass is located at the 12:00, 3:00, 6:00 or 9:00 position, consider the lesion to be overlapping and code to “breast, overlapping lesion (C50.8).”

NOTE 2: If the exact location of the mass is not reported in the operative or pathology report, review the mammogram and/or history and physical examination report for the specific location.

2. Esophagus (C15.0 - C15.9)

The esophagus is a muscular tube about ten inches (25 cm) long extending from the hypopharynx to the stomach. The location of esophageal lesions is frequently measured from the incisors (front teeth) and may be approximated as follows.

<i>Primary Site</i>	<i>Topography Code</i>
Cervical - begins at the lower border of the cricoid cartilage and ends at the thoracic inlet (suprasternal notch) approximately 18 cm measuring from the upper incisors	C15.0
Upper thoracic - extends from the thoracic inlet to the level of the tracheal bifurcation, approximately 24 cm from the upper incisors	C15.1
Mid-thoracic - proximal half of the esophagus between the tracheal bifurcation and the esophago-gastric junction. The lower level is approximately 32 cm from the upper incisor teeth	C15.2
Upper third (proximal) - extends from the sixth cervical vertebra to the sixth thoracic vertebra	C15.3
Middle third - extends from the sixth thoracic vertebra to the ninth thoracic vertebra	C15.4
Lower third (distal) - extends from the ninth thoracic vertebra to the cardioesophageal	C15.5

junction

3. Stomach (C16.0 - C16.9)

The stomach lies just below the diaphragm in the upper part of the abdominal cavity primarily to the left of the midline under a portion of the liver.

<i>Primary Site</i>	<i>Topography Code</i>
Cardia - portion of the stomach surrounding the cardioesophageal junction, or cardiac orifice (the opening of the esophagus into the stomach)	C16.0
Fundus (or Fornix) - enlarged portion to the left and above the cardiac orifice	C16.1
Body (or Corpus) - central part of the stomach	C16.2
Pyloric antrum - lower or distal portion above the duodenum; the opening between the stomach and the small intestine is the <i>pylorus</i> .	C16.4

4. Small Intestine (C17.0 - C17.9)

The small intestine is a tube measuring about 2.5 cm in diameter and over 20 feet (600 cm) in length coiled in loops which fills most of the abdominal cavity.

<i>Primary Site</i>	<i>Topography Code</i>
Duodenum - located just below the pyloric portion of the stomach and is about 25 cm long. The duodenum extends from the pyloric sphincter and becomes the jejunum where the tube turns forward and downward.	C17.0
Jejunum - continues for over 200 cm and then becomes the ileum, although there is no demarcation between the two divisions	C17.1
Ileum - over 300 cm long and joins the large intestine at the ileocecal valve	C17.2

5. Large Intestine (C18.0 - C20.9)

The large intestine (colon, rectum and anus) is approximately five feet (150 cm) long with a diameter of about 6cm, decreasing towards the lower end. The measurements listed next to each sub-site are from the anal verge.

<i>Primary Site</i>	<i>Measurement</i>	<i>Topography Code</i>
Rectum - extends down to the anal canal	4 - 12 cm	C20.9
Rectosigmoid - upper part of the rectum, generally that above the peritoneal reflection	10 - 17 cm	C19.9
Sigmoid - joins the rectum at the rectosigmoid junction	17 - 57 cm	C18.7

<i>Primary Site</i>	<i>Measurement</i>	<i>Topography Code</i>
Descending (left colon) - starts at the splenic flexure and passes downward until it turns towards the midline at the rim of the pelvis and continues downward to become the sigmoid colon	57 - 82 cm	C18.6
Transverse (middle colon) - begins at the hepatic flexure passing horizontally across the abdomen, below the liver and stomach and above the small intestine. On the left side of the abdomen near the spleen, the colon turns downward at the junction of the transverse and descending colon forming the splenic flexure.	82 - 132 cm	C18.4
Ascending (right colon) - extends upward from the cecum on the right side of the abdomen to the under surface of the right lobe of the liver where it turns to the left forming the hepatic flexure	132 - 147 cm	C18.2
Cecum - large cul-de-sac at the lower end of the ascending colon (proximal to the entrance of the ileum into the colon). It comprises the first 5-7 cm of the large intestine.	at 150 cm	C18.0
Hepatic Flexure - connects ascending to transverse (lies under the right lobe of the liver near the duodenum)		C18.3
Splenic Flexure - connects transverse to descending (located near the spleen and tail of the pancreas)		C18.5
Anal Canal - constitutes the final 2.5cm of the digestive tract. It begins at the anorectal junction and ends at the anal verge where the anal tube turns outward to blend with the perianal skin.		C21.1
<i>NOTE:</i> Each individual's anatomic make-up is different, as such the measurements listed above should be used as a GUIDELINE only.		

6. Lung (C34.0 - C34.9)

<i>Primary Site</i>	<i>Topography Code</i>
Main bronchus (Carina, Hilar)	C34.0
Upper lobe (Apex, Lingual)	C34.1
Middle lobe (only the right lung has a middle lobe)	C34.2
Lower lobe	C34.3

7. Lymphoma

Lymphomas are considered a systemic (generalized) disease in contrast to solid tumors, such as breast or stomach cancer. The majority of lymphomas arise in *lymph nodes* (C77.0 - C77.9) or *lymphatic tissue*, such as *tonsils* (C09._), *spleen* (C42.2), *Waldenyer's Ring* (C14.2), or *thymus* (C37.9). These are all called “nodal” lymphomas.

Lymphomas that arise from lymphatic cells in organs, such as *stomach* or *intestine*, are called extranodal or extralymphatic. The terms extranodal and extralymphatic are sometimes used interchangeably. Extranodal means that the lymphoma does not arise in a lymph node but may arise in one of the lymphatic tissues mentioned above. While extralymphatic means the lymphoma arises in a non-lymphatic organ or tissue.

When referring to nodal versus extra nodal lymphomas, it is important to identify the primary site of the tumor, which may not be the site of the biopsy, the site of spread, or metastasis. For example, diffuse large B-cell lymphoma can be either a nodal or extranodal tumor depending on the primary site. The biopsy may be of a lymph node, but the bulk of the primary disease may be in a primary extranodal organ.

If the site of origin of the lymphoma is in the lymph nodes, record/code the primary site to that specific lymph node chain (C77.0 - C77.5, C77.8, C77.9).

Example A 60 year old female was seen with an enlarged left cervical lymph node that had been present for three months. History and physical examination revealed left cervical lymphadenopathy, and the remainder of examination is within normal limits. Excision of left cervical lymph node revealed: “diffuse large cell non-Hodgkin lymphoma.” Staging work-up included a CT scan of the abdomen/pelvis and a bone marrow biopsy, both of which were negative for malignancy.
Record the primary site as “cervical lymph node (C77.0).”

If a lymphoma involves multiple lymph node regions, record/code the primary site as “lymph nodes of multiple regions (C77.8).” Do NOT code a specific lymph node chain.

Example A 53 year old male relatively healthy and physically active recently noted fatigue and groin soreness. Physical examination revealed several small 1cm nodes in the supraclavicular and axillary areas and two larger 2cm firm inguinal lymph nodes. The rest of the exam was within normal limits. Supraclavicular lymph node biopsy was positive for “B-cell chronic lymphocytic lymphoma.”
Record the primary site as “multiple lymph nodes (C77.8).”

If a lymphoma arises in an extranodal site, record/code the site of origin, which may or may not be the site of the biopsy.

Example Abdominal exploration with biopsy, mass body of stomach: “lymphatic cells consistent with mixed large and small cell non-Hodgkin lymphoma.” CT scan impression: large mass within the stomach. No enlarged lymph nodes identified.

Record the primary site as “body of stomach (C16.2).”

Record/code “lymph node, NOS (C77.9)” using the following guidelines:

1. When the site of origin is not identified for a lymphoma.
2. A patient has diffuse lymphoma and the primary site is unknown or not specified.
3. A lymphoma mass is identified as “retroperitoneal,” “inguinal,” “mediastinal,” or “mesentery” and no specific information is available to indicate what tissue is involved.
4. Bone marrow metastases are present and the primary site of a lymphoma is unknown or not specified.

Example Bone marrow biopsy positive for “diffuse large cell non-Hodgkin lymphoma. CT scan impression: Retroperitoneal mass suspicious for malignancy.
Record the primary site as “lymph nodes, NOS (C77.9).”

Record/code mycosis fungoides and cutaneous lymphomas to the appropriate site of the skin (C44.0 - C44.9).

Example Patient presented with a large, raised mole on the back of the left arm. A biopsy revealed: “mycosis fungoides.”
Record the primary site as “skin, arm (C44.6).”

NOTE: The World Health Organization (WHO) diagnosis of “B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma” is coded as 9823/3, and cross-referenced to 9670/3, “malignant lymphoma, small B lymphocytic.” Code to the following scenarios.

If this WHO term is diagnosed in blood or bone marrow record/code the histology as “B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (9823/3)” and record the primary site as “bone marrow (C42.1).”

If this WHO term is diagnosed in tissue, lymph nodes or any organ in combination with blood or bone marrow, record/code the histology as “B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma,” which is cross referenced to “small B-Cell lymphocytic lymphoma (9670/3)” and record the primary site to the “*specific lymph node chain (C77.0 -C77.9) or to the extranodal site of origin.*”

8. Melanoma of the Skin (C44.0 - C44.9)

Each occurrence of melanoma of the skin is a NEW AND SEPARATE primary unless a physician states otherwise. If a patient is diagnosed with metastatic melanoma and the primary site is not identified, record as “skin, NOS (C44.9).”

Example A 46 year old female presented in January 2002, with a skin biopsy

positive for “malignant melanoma.” Past medical history was positive for malignant melanoma of the right arm in July 2001. Pathology report impression: “skin, right arm positive for malignant melanoma.”
Record as a new/separate primary “skin, arm (C44.6).”

Example Wide excision skin of mid back: “metastatic malignant melanoma.”
Past medical history negative for malignant melanoma. Physical exam revealed scar of mid back from recent excision. Remainder of exam within normal limits, no other skin lesions identified.
Record the primary site as “skin, NOS (C44.9).”

9. Kaposi Sarcoma

Code to the *site in which it arises*. If Kaposi sarcoma arises in the skin and another site simultaneously, code to skin.

10. Leukemia (C42.1)

Code the primary site for leukemia as “bone marrow (C42.1).”

11. Multiple Myeloma (C42.1)

Code the primary site for multiple myeloma as “bone marrow (C42.1).”

DETERMINING MULTIPLE PRIMARY TUMORS

Solid Malignant Tumors

Prior to abstracting a case and determining if a multiple primary exists, a copy of the **Multiple Primary and Histology Coding Rules** manual is required. Go to <http://seer.cancer.gov/tools/mphrules/> to download the manual.

A separate report for each reportable primary tumor **is** required. Reports for subsequent re-diagnosis of recurrence/metastatic disease of a previously reported condition, or additional treatments for a previously reported condition is **not** required. A patient may have more than one primary tumor develop, which may be diagnosed at a single point in time or diagnosed at different points in time. In general, if a primary tumor is diagnosed as occurring within several distinct anatomical sites, each site is reportable as a primary tumor. Multiple primaries should be reported in other instances as well.

Equivalent or Equal Terms

Multicentric, multifocal

Tumor, mass, lesion, neoplasm

Definitions

Note: Use these terms and definitions for all reportable cases except lymphoma and leukemia primaries (M9590-9989).

Bilateral: Relating to the right **and** left sides of the body or of a body structure; bilaterality is **not** an indication of single or multiple primaries.

Clinical Diagnosis: A diagnosis that is not microscopically confirmed. It may be based on information from diagnostic imaging or the clinician's expertise.

Contiguous tumor: A single tumor that involves, invades, or bridges adjacent or connecting sites or subsites.

Focal: An adjective meaning limited to one specific area. A focal cancer is limited to one specific area or organ. The area may be microscopic **or** macroscopic.

Foci: Plural of focus.

Focus: A term used by pathologists to describe a group of cells that can be **seen only by a microscope**. The cells are noticeably different from the surrounding tissue either by their appearance, chemical stain, or other testing.

Laterality: Indication of which side of a **paired organ/site** a tumor is located. (See Paired organ/site)

Most representative specimen: The pathologic specimen from the surgical procedure that removed the most **tumor** tissue.

Multiple primaries: More than one reportable case.

Overlapping tumor: The involved sites are adjacent (next to each other) and the tumor is contiguous.

Paired organ/site: There are two sides, one on the left side of the body and one on the right side of the body. (See Laterality)

Recurrence: This term has two meanings:

1. The reappearance of disease that was thought to be cured or inactive (in remission). Recurrent cancer starts from cancer cells that were not removed or destroyed by the original therapy.
2. A new occurrence of cancer arising from cells that have nothing to do with the earlier (first) cancer. A new or another occurrence, incidence, episode, or report of the same disease (cancer) in a general sense – a new occurrence of cancer.

Single primary: One reportable case.

Unilateral: Relating to one side of the body or one side of a body structure.

Determining Multiple Primaries for Solid Malignant Tumors

Note: The rules do not apply to hematopoietic primaries (lymphoma and leukemia) of any site or to the reportable benign or borderline intracranial or CNS tumors.

A. General Information

1. Use these rules to determine the number of reportable primaries. Do **not** use these rules to determine case reportability, stage, or grade.
2. The 2007 multiple primary and histology coding rules **replace all previous** multiple primary and histology coding **rules**.
3. The rules are **effective** for cases **diagnosed January 1, 2007** and after. Do not use these rules to abstract cases diagnosed prior to January 1, 2007.
4. Read the **General Instructions** and the **site-specific Equivalent Terms and Definitions** before using the multiple primary rules.
5. The multiple primary and histology coding rules are available in **three formats**: flowchart, text, and matrix. The **rules are identical**, only the formats differ. Use the rules in the format that is easiest for you to follow.
6. **Notes** and **examples** are included with some of the rules to **highlight key points** or to add **clarity** to the rules.
7. **Do not use** a physician's statement to decide whether the patient has a recurrence of a previous cancer or a new primary. Use the multiple primary rules as written **unless a pathologist compares** the present

tumor to the “original” tumor and states that this tumor is a recurrence of cancer from the previous primary.

Determining Multiple Primaries for Non-solid Malignant Tumors – Hematologic Malignancies

Use the Determining Multiple Primaries: Hematopoietic Primaries (Lymphoma and Leukemia) rules and table “Definitions of Single and Subsequent Primaries for Hematologic Malignancies” to determine single versus multiple primaries for lymphoma and leukemia cases.

Download and print the Definitions of Single and Subsequent Primaries for Hematologic Malignancies from http://seer.cancer.gov/icd-o-3/hematopoietic_primaries.d03152001.pdf

Determining Multiple Primaries for Benign/borderline Intracranial and CNS Tumors

Same site: The first two numeric digits of the ICD-O-3 topography code are identical.

Different site: The first two numeric digits of the ICD-O-3 topography code are different.

Timing: The amount of time between the original and subsequent tumors is not used to determine multiple primaries because the natural biology of non-malignant tumors is that of expansive, localized growth.

When there are **multiple tumors**, use the following table to determine if the tumors are the same histology or different histologies for nonmalignant (behavior /0 or /1) primary intracranial and central nervous system tumors (C70.0–C72.9, C75.1–C75.3).

<i>Histologic Groupings to Determine Same Histology for Non-malignant Brain Tumors</i>	
<i>Primary Site</i>	<i>Histology Code</i>
Choroid plexus neoplasms	9390/0, 9390/1
Ependymomas	9383, 9394, 9444
Neuronal and neuronal-glial neoplasms	9384, 9412, 9413, 9442, 9505/1, 9506
Neurofibromas	9540/0, 9540/1, 9541, 9550, 9560/0
Neurinomatosis	9560/1
Neurothekeoma	9562
Neuroma	9570
Perineurioma, NOS	9571/0

Instructions for Using Histologic Group Table

1. **Both** histologies are listed **in** the **table**

- a. Histologies that are in the same **grouping** or row in the table are the **same histology**.
 - b. **Note:** Histologies that are in the same grouping are a progression, differentiation or subtype of a single histologic category.
 - c. Histologies listed in **different groupings** in the table are **different histologies**.
2. One or both of the **histologies** is **not** listed in the **table**
 - a. If the **ICD-O-3 codes** for both histologies have the **identical** first three digits, the histologies are the **same**.
 - b. If the first three digits of the **ICD-O-3** histology code are **different**, the histology types are different.

The multiple primary rules are presented in two formats, text and table. Note that the rule numbers in both formats are identical.

Use the following rules to determine whether to report a single primary or multiple primaries. Coding rules for the data items mentioned, such as primary site, histology, laterality, etc. are not described in detail here; refer to the instructions for coding each data item.

Note: If there is a **single tumor**, it is always a **single** primary

Rule 1: Multiple non-malignant tumors of the **same histology** that recur in the **same site** and **same side** (laterality) as the original tumor are recurrences (single primary) even after 20 years.

Rule 2: Multiple non-malignant tumors of the **same histology** that recur in the **same site** and it is unknown if it is the same side (laterality) as the original tumor are recurrences (single primary) even after 20 years.

Rule 3: Multiple non-malignant tumors of the same histology in **different sites** of the CNS are separate (multiple) primaries.

Rule 4: Multiple non-malignant tumors of the same histology in **different sides** (laterality) of the CNS are separate (multiple) primaries.

Rule 5: Multiple non-malignant tumors of different histologies are separate (multiple) primaries)

<i>Table of Rules to Determine Multiple Primaries for Benign and Borderline Primary Intracranial and CNS Tumors</i>				
<i>Rule #</i>	<i>Site</i>	<i>Laterality</i>	<i>Histology</i>	<i>Primary(ies)</i>
1	Same	Same	Same	Single
2	Same	Unknown	Same	Single
3	Different	Any	Same	Multiple
4	Same	Different sides of the same site in the CNS	Same	Multiple

5	Any	Any	Different	Multiple
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ICD-O-3 SEER Site/Histology Validation List

Specific histologies arise in specific tissue types. Refer to the SEER site/histology validation list to determine valid primary site and histology combinations for cases diagnosed ***on or after*** January 1, 2001.

The Site/Histology Validation List can be downloaded by visiting www.seer.cancer.gov/icd-o-3/

This insert is intended as a reference for ICD-O-3 only.

Most comparisons can be made to the three-digit histology code but a four-digit histology comparison is required whenever an “!” appears to the left of the three-digit histology name.

To use the SEER site/histology validation list:

- a. Locate the three-digit topography code in ICD-O-3, for the primary site in question.
- b. Locate the five-digit morphology code in ICD-O-3, for the primary site in question.
- c. Locate the three-digit topography code in the SEER site/histology validation list in the left hand column, in numeric order by topography code.
- d. Locate the five-digit morphology code in the SEER site/histology validation list in the right hand column, in numeric order by morphology code.
- e. If the five-digit morphology code is listed in the right hand column, the site/histologic type is valid.
- f. If the five-digit morphology code is NOT listed in the right hand column, the site/histologic type is NOT valid.
 - 1) Confirm with your pathologist and/or managing physician if the site/histology is valid and code appropriately.

NOTE: If the site/histology is valid according to the pathologist and/or managing physician, document this in the text to justify the selected codes. As the purpose of text information is to provide the opportunity for documenting and checking coded values, information documenting the disease process should be entered from the medical record and should NOT be generated electronically from coded values.

PAIRED ORGANS

Laterality (paired organs) at diagnosis describes the primary site ONLY.

- 0 - Not a paired site
- 1 - Right side
- 2 - Left side
- 3 - One side only, NOS
- 4 - Bilateral Involvement
- 9 - Unspecified

Laterality codes “1 - 4 or 9” must be used for the sites listed on the following pages except as noted.

If the primary site is unknown, do NOT code the laterality of the metastatic site, the laterality MUST be coded as “0 - Not a paired site.”

If the primary site being reported is NOT defined as a paired organ; laterality MUST be coded as “0 - Not a paired site.”

Use code “3 - One side only, NOS” if the laterality is not known but the tumor is confined to a single side of a paired organ.

Example The pathology report states that the “patient has one 2 cm carcinoma in the upper pole of the kidney.”
Code laterality as “3 - One side only, NOS” because laterality is not specified but the tumor is not present on both sides of a paired site.

Use code A9 - Unknown” when there is a midline tumor or when there is a paired site but the laterality is unknown because disease is extensive.

Examples Admitting history states that the patient has a positive, sputum cytology but is being treated with radiation for painful bony metastases.
Code laterality as “9 - Unknown,” because there is no information concerning laterality in the implied diagnosis of lung cancer and the case is metastatic.

 Patient has a melanoma of skin just above the umbilicus.
Code laterality as “9 - Midline.”

The skin of the lip, scalp and neck is NOT considered a paired organ, laterality for these subcategories MUST be coded as “0 - Not a paired site.”

If reporting the primary site of the skin as “skin, NOS (C44.9)” the laterality MUST be coded as “0 - Not a paired site.”

NOTE 1: The prostate and thyroid are made up of lobes, which are represented by left and right - do NOT code as a paired organ.

NOTE 2: The description of right colon and left colon does NOT apply to laterality, but to the exact location (sub-site) of the tumor origin in the colon. Code right colon to ascending colon (C18.2) and the left colon to descending colon (C18.6).

<i>List of Paired Organs</i>	
<i>Primary Site Description</i>	<i>Topography Code</i>
Acoustic nerve	C72.4
Adrenal gland	C74.0 – C74.9
Breast	C50.0 - C50.9
Carotid body	C75.4
Cerebral meninges, NOS (excluding diagnoses prior to 2004)	C70.0
Cerebrum (excluding diagnoses prior to 2004)	C71.0
Connective, subcutaneous and other soft tissue of upper limb and shoulder	C49.1
Connective, subcutaneous, and other soft tissue of lower limb and hip	C49.2
Cranial Nerve, NOS (excluding diagnoses prior to 2004)	C72.5
Epididymis	C63.0
Eye and lacrimal gland	C69.0 – C69.9
Fallopian tube	C57.0
Frontal sinus	C31.2
Kidney, NOS	C64.9
Long bones of lower limb and associated joints	C40.2
Long bones of upper limb, scapula and associated joints	C40.0
Lung	C34.0 – C34.9
Main bronchus (excluding carina)	C34.0
Maxillary sinus	C31.0

<i>List of Paired Organs</i>	
<i>Primary Site Description</i>	<i>Topography Code</i>
Middle ear	C30.1
Nasal cavity (excluding nasal cartilage and nasal septum code '0')	C30.0
Occipital lobe (excluding diagnoses prior to 2004)	C71.4
Olfactory nerve (excluding diagnoses prior to 2004)	C72.2
Optic nerve (excluding diagnoses prior to 2004)	C72.3
Ovary	C56.9
Parietal lobe (excluding diagnoses prior to 2004)	C71.3
Parotid gland	C07.9
Pelvic bones (excluding sacrum, coccyx and symphysis pubis, code '0')	C41.4
Peripheral nerves and autonomic nervous system of lower limb and hip	C47.2
Peripheral nerves and autonomic nervous system of upper limb and shoulder	C47.1
Pleura	C38.4
Renal pelvis	C65.9
Rib and clavicle (excluding sternum code '0')	C41.3
Short bones of lower limb and associated joints	C40.3
Short bones of upper limb and associated joints	C40.1
Skin of external ear	C44.2
Skin of eyelid	C44.1
Skin of lower limb and hip	C44.7
Skin of other unspecified parts of face (midline code '9')	C44.3
Skin of trunk (midline code '9')	C44.5
Spermatic cord	C63.1
Sublingual gland	C08.1
Submandibular gland	C08.0

<i>List of Paired Organs</i>	
<i>Primary Site Description</i>	<i>Topography Code</i>
Temporal lobe (excluding diagnoses prior to 2004)	C71.2
Testis	C62.0 – C62.9
Tonsil, NOS (faucial tonsil, palatine tonsil)	C09.9
Tonsil, overlapping lesion	C09.8
Tonsillar fossa	C09.0
Tonsillar pillar	C09.1
Ureter	C66.9

TUMOR GRADE

The tumor grade refers to the primary site ONLY.

If there is no grade provided for the primary site, code as “9 - Unknown,” even if a grade is given for a metastatic site.

The grade of a tumor describes how much or how little a tumor resembles the normal tissue from which it arose. This is expressed in degrees of differentiation.

The instructions for coding grade and differentiation are found in the “Morphology” section of the ICD-O-3 “Coding Guidelines for Topography and Morphology” (ICD-O-3 pp. 30–34).

The International Classification of Diseases for Oncology (ICD-O) includes, a single-digit code number designating the grade or degree of differentiation of malignant neoplasms. The standard tumor grade codes are as follows:

<i>Description</i>	<i>Code</i>
Grade I; grade i; grade 1; well differentiated; differentiated, NOS	1
Grade II; grade ii; grade 2; moderately differentiated; moderately well differentiated; intermediate differentiation	2
Grade III; grade iii; grade 3; poorly differentiated; dedifferentiated	3
Grade IV; grade iv; grade 4; undifferentiated; anaplastic	4
<i>Lymphomas and Leukemias</i>	
T-cell; T-precursor	5
B-cell; Pre- B, B-precursor	6
Null cell; Non T-non B	7
NK - Natural Killer Cell	8
<i>All Histologies</i>	
Cell type not determined; Not stated; Not applicable; Unknown Primary	9

Codes “5-7,” define T-cell or B-cell origin for leukemias and lymphomas. The terms T-cell, B-cell, Null cell, or Natural killer cell classifications take precedence over any other grading or differentiation. Do NOT use “high grade,” “low grade,” or “intermediate grade” descriptions for lymphomas as a basis for

differentiation. The terms are categories in the Working Formulation of Lymphoma Diagnoses and do NOT relate to the grade.

Code “9 - Unknown” for the tumor grade when the primary site is unknown.

Do NOT code FIGO grade as a tumor grade. FIGO grade is based on the percentage of non-squamous portions of the tumor and corresponds roughly to a three grade differentiation system. For a diagnosis that includes a term and a FIGO grade, such as “moderately differentiated, FIGO grade II,” disregard the FIGO grade and code according to the term “moderately differentiated.”

For sites other than breast, prostate and kidney, code the tumor grade using the following priority order:

1) terminology; 2) histologic grade; 3) nuclear grade.

The grade of a tumor, including brain, can be established through magnetic resonance imaging (MRI) or positron emission tomography (PET) when there is no tissue diagnosis.

Grade astrocytomas (M-9383, 9484, 9400, 9401, 9410– 9412, 9420, 9421) according to ICD-O-3 rules: I (well differentiated), Code 1; II (intermediate differentiation), Code 2; III (poorly differentiated), Code 3; IV (anaplastic), Code 4. Do not automatically code glioblastoma multiforme as Grade IV if no grade is given, code 9 (Unknown). For primary tumors of the brain and spinal cord (C71.0–C72.9) do not record the WHO grade as the tumor *Grade/Differentiation* (NAACCR Item #440); record the WHO grade in the data item *CS Site-Specific Factor 1* (NAACCR Item #2880).

Code the grade or degree of differentiation as stated in the FINAL pathologic description.

<i>Example</i>	Microscopic Description:	Moderately differentiated squamous cell carcinoma with poorly differentiated areas.
	Final Description:	Moderately differentiated squamous cell carcinoma.
	<i>Code the tumor grade as:</i>	<i>2 - Moderately differentiated</i>

If the grade or degree of differentiation is NOT stated in the final pathologic diagnosis, code the grade or degree of differentiation as given in the microscopic description or comment.

<i>Example</i>	Microscopic Description:	Poorly differentiated, squamous cell carcinoma, invading the adventitia.
	Final Description:	Squamous cell carcinoma, invading the adventitia.
	<i>Code the tumor grade as:</i>	<i>3 - poorly differentiated</i>

If a diagnosis indicates two different grades or degrees of differentiation code to the numerically higher grade code, even if it does not represent the majority of the lesion.

Examples Moderate to poorly differentiated carcinoma.
Code the tumor grade as: 3 - poorly differentiated

Predominately grade II, focally grade III.
Code the tumor grade as: 3 - poorly differentiated

If a needle biopsy or incisional biopsy of a primary site has a differentiation given and the excision or resection does NOT, code the grade from the biopsy or incisional biopsy.

Example Biopsy of sigmoid colon: poorly differentiated adenocarcinoma.
 Sigmoidectomy: adenocarcinoma invading the pericolic tissue.
Code the tumor grade as: 3 - poorly differentiated

If there is a difference between the grade given for a biopsy of the primary site and the grade given for the resected specimen, code the numerically higher grade.

Example Biopsy of breast: poorly differentiated ductal adenocarcinoma.
 Mastectomy: well differentiated ductal adenocarcinoma.
Code the tumor grade as: 3 - poorly differentiated

Coding Two-grade Systems

Two grade systems apply to colon, rectosigmoid junction, rectum (C18.0–C20.9), and heart (C38.0).

Code

these sites using a two-grade system; Low Grade (2) or High Grade (4). If the grade is listed as 1/2 or as Low Grade, then code 2. If the grade is listed as 2/2 or as High Grade, then code 4.

<i>Histologic Grade</i>	<i>Description</i>	<i>Code</i>
I/II or 1/2	Low grade	2
II/II or 2/2	High Grade	4

Coding Three-grade Systems

Three grade systems apply to peritoneum (C48.1, C48.2), breast (C50.0–C50.9), endometrium (C54.1), fallopian tube (C57.0), prostate (C61.9), kidney (C64.9), and brain and spinal cord (C71.0–C72.9). For sites other than breast, prostate and kidney, code the tumor grade using the following priority order:

1) Terminology; 2) Histologic Grade; and 3) Nuclear Grade as shown in the table below.

<i>Histologic Grade</i>	<i>Description</i>	<i>Code</i>
I/III or 1/3	Low grade, well to moderately differentiated	2
II/III or 2/3	Medium grade, moderately undifferentiated, relatively undifferentiated	3
III/III or 3/3	High Grade, poorly differentiated to undifferentiated	4

Example Adenocarcinoma of the sigmoid colon. Grade 2 of 3.
Code the tumor grade as: 3 - poorly differentiated

EXCEPTION: Breast cases using the Bloom Richardson grading system; see the following pages “Grading Breast Cases” for further information see page 108.

Coding Four-grade Systems

A tumor grade may be described as “1/4” or “I/IV” meaning this is a grade 1 of a four-grade system. To use a four-grade system, code the grade as 1, 2, 3 or 4 respectively.

<i>Tumor Grade</i>	<i>Description</i>	<i>Code</i>
I/IV or 1/4	Well differentiated	1
II/IV or 2/4	Moderately differentiated	2
III/IV or 3/4	Poorly differentiated	3
IV/IV or 4/4	Undifferentiated	4

Example Squamous cell carcinoma, Grade 3/4 of the distal esophagus.
Code the tumor grade as: 3 - poorly differentiated

Oftentimes a tumor grade will be described using a slash (/) or a dash (-). The slash describes a specific grading system and the dash describes a range. Code the tumor grade using the slash according to the grading system. Code the tumor grade using the dash to the numerically higher grade code described.

Examples Mucinous adenocarcinoma of the rectum, Grade 1/3.
Code the tumor grade as: 2 - moderately differentiated

Transitional cell carcinoma of the bladder, Grade 1-2/3.
Code the tumor grade as: 3 - poorly differentiated

Large cell carcinoma of the lung, Grade 2-3/4
Code the tumor grade as: 3 - poorly differentiated

There are several diagnoses that usually do not have a statement as to the tumor grade, therefore the tumor grade is coded as “9 - Unknown.” However, if a tumor grade is stated, it MUST be coded. These diagnoses are as follows:

In-situ lesions (any site)
 Lobular carcinoma of the breast
 Malignant melanoma of the skin
 Multiple myeloma (bone marrow)
 Unknown primary site

Brain and Spinal Cord (Malignant)

Oftentimes, brain and spinal cord diagnoses are assigned a WHO (World Health Organization) grade. This type of grading is **NOT** the same as the ICD-O differentiation or tumor grade code. The WHO grading system is used to estimate prognosis and is for the purpose of staging.

If the ICD-O grade or differentiation code is used for central nervous system tumors, coders should give preference to terms from the diagnosis - such as low grade (Code 2) or anaplastic (Code 4) - rather than using the reported WHO grade. In many cases, there will be no verbal description of the grade and these cases must be coded as “9 - Unknown” for the ICD-O grade or differentiation.

In the absence of other information on grade, code cases as follows:

<i>Description</i>	<i>Code</i>
Astrocytoma grade 1	1
Astrocytoma grade 2 Astrocytoma (low grade)	2
Astrocytoma grade 3	3
Astrocytoma grade 4 Anaplastic astrocytoma	4
Glioblastoma multiforme Pilocytic astrocytoma	9

Examples Glioblastoma multiforme of the frontal lobe, WHO grade 3.
Code the tumor grade as: 9 - unknown

Pilocytic astrocytoma of the occipital lobe.
Code the tumor grade as: 9 - unknown

Anaplastic astrocytoma of the cerebellum.
Code the tumor grade as: 4 - anaplastic

Low grade astrocytoma of the cerebrum
Code the tumor grade as: 2 - low grade

NOTE: Table 47-2 located on page 282 of the Fifth Edition of the AJCC Staging Manual **cannot** be used to assign a grade code to a pathology specimen. This table applies to WHO grading only, NOT the ICD-O grading system.

Brain and CNS (Benign)

The tumor grade for benign/borderline intracranial and CNS tumors is ALWAYS coded as a ‘**9 – not determined, not stated or not applicable.**’ Do not record the World Health Organization (WHO) grade in the 6th digit of the histology code.

Example: Craniopharyngioma, WHO Grade 2
Code as: 9350/19
WHO Grade is recorded in site specific factor 1 as ‘020.’ (see below)

The World Health Organization (WHO) grade should be recorded in site specific factor 1 of the Collaborative Staging (CS) system. Attention must be paid to the preservation of histologic grade, which

will continue to be collected as the histology sixth digit 'Grade.'

Use the following codes for all benign/borderline intracranial and CNS tumor sites when recording the WHO grade.

- 010 WHO Grade I
- 020 WHO Grade II
- 030 WHO Grade III
- 040 WHO Grade IV
- 999 Clinically diagnosed/grade unknown; not documented in the medical record; grade unknown, NOS

EXCEPTION: There is no site specific factor 1 for *pituitary gland, craniopharyngeal duct* and *pineal gland*. Code as '**888 – not applicable**' in site specific factor 1 of the CS system.

Breast C50.0 – C50.9

For breast cancers, code the tumor grade using the following priority order:

- 1) Bloom-Richardson (Nottingham) Scores
- 2) Bloom-Richardson Grade
- 3) Nuclear Grade
- 4) Terminology
- 5) Histologic

Grade as shown on the next page.

The nuclear grade can ONLY be used for breast cases when no other tumor grade is given. If a nuclear grade is given for a primary site other than breast, and no other tumor grade is given, code the tumor grade as "9 - Unknown." Do NOT use the nuclear grade.

Example Infiltrating adenocarcinoma of the sigmoid colon invading the pericolic fat; nuclear grade 3. Regional lymph nodes negative.
Code the tumor grade as: 9 - unknown

The nuclear grade can only be used for breast cases when no other tumor grade is given.

The Bloom-Richardson grading scheme is a semi-quantitative grading method based on three morphologic features of "*invasive no-special-type*" breast cancers. The morphologic features are:

1. degree of tumor tubule formation
2. tumor mitotic activity
3. nuclear pleomorphism of tumor cells (nuclear grade)

To obtain the final Bloom-Richardson score, add the score from the tubule formation, the mitotic activity and the nuclear pleomorphism. There are seven possible scores that are condensed into three BR grades. The three grades then translate into well differentiated (BR low grade), moderately differentiated (BR intermediate grade), and poorly differentiated (BR high grade.)

Use the following table to determine the code when the Bloom Richardson grading scheme is used.

<i>Conversion Table for Bloom-Richardson (BR) Score and Grade</i>			
<i>BR Combined Scores</i>	<i>BR Grade</i>	<i>Differentiation</i>	<i>Code</i>
3, 4, 5	low grade	Well differentiated	1
6, 7	intermediate grade	Moderately differentiated	2
8, 9	high grade	Poorly differentiated	3

Examples Ductal carcinoma of the breast, Bloom-Richardson 3 + 2 + 4 = 9
Code the tumor grade as: 3 - poorly differentiated

Ductal adenocarcinoma of the breast, Bloom-Richardson, low grade.
Code the tumor grade as: 1 - well differentiated

Usually there will be no statement as to the tumor grade for lobular carcinomas of the breast. This is due to the controversy among pathologist when applying the Scarff Bloom-Richardson Grading System. With the lack of architectural criteria and the challenge in obtaining accurate mitotic counts while reading the specimen, it is difficult to assign a tumor grade.

Kidney C64.9

For kidney cancers, code the tumor grade using the following priority rules:

- 1) Fuhrman Grade
- 2) Nuclear Grade
- 3) Terminology (well diff, mod. diff.)
- 4) Histologic Grade.

These prioritization rules do NOT apply to Wilm's tumor (M-8960).

Lymphoma and Leukemia

For lymphomas and leukemia, information on T-cell, B-cell, null cell, or NK cell has precedence over information on grading or differentiation.

Code ANY statement of T-cell, B-cell, null cell, or NK cell involvement whether or not marker studies are documented in the patient record.

For lymphomas, DO NOT code the descriptions "high grade," "low grade," or "intermediate grade" in the Grade, Differentiation, or Cell Indicator field. These terms refer to the categories in the Working Formulation of lymphoma diagnoses and NOT to a histologic grade.

If the tumor grade given is NOT one of the terms listed above, code as “9 - Unknown.”

Additional terms that should be coded are as follows:

<i>Description</i>	<i>Code</i>
T-cell, T-cell phenotype T-precursor Gamma-delta T	5
B-cell, B-cell phenotype B-precursor Pre-B	6
Null cell Non T-non-B Common cell	7
Natural killer cell (NK)	8

Example Large diffuse, B-cell lymphoma.
Code the tumor grade as: 6 - B-cell

According to the medical understanding on which the World Health Organization (WHO) Classification of Hematopoietic Neoplasms is based, some lymphomas and leukemias are the same disease process with different presentations. The WHO Classification lists B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (BCCLL/SLL) as a single entity, the same disease at a different stage. The topographic or primary site for BCCLL/SLL depends on the location in which the diagnosis was made. Regardless of the primary site, the tumor grade is coded as “6 - B-cell.”

Non-Histology Proven Cases

When there is not a tissue diagnosis, it may still be possible to establish the grade of a tumor through Magnetic Resonance Imaging (MRI) or Positron Emission Tomography (PET).

1) If there is no tissue diagnosis, but there is a grade or degree of differentiation available from an MRI or PET report, code the grade based upon these reports.

Example MRI of the brain indicated as mass in the temporal lobe. Suspect anaplastic astrocytoma, recommend biopsy.
Code the tumor grade as: 4 - anaplastic

2) If there is a tissue diagnosis, grade should be from the pathology report ONLY.

Prostate C61.9

Prostate cancers are graded using a Gleason’s score or pattern. Gleason’s grading for prostate primaries

is based on a 5-component system (5 histologic patterns). Prostatic cancer shows two main histologic patterns. The primary pattern - occupying greater than 50% of the cancer - is indicated by the first number of the Gleason's grade and the secondary pattern is indicated by the second number. These two numbers are added together to create a pattern score, ranging from 2 to 10.

Example Gleason 3 + 4 = 7

NOTE: Effective for prostate cases diagnosed January 1, 2003 or later, the **Gleason score takes precedence** over all other grading systems.

If only one number is given and it is **greater than 5**, assume that it is a score.

If only one number is given and it is **less than or equal to 5**, assume that it describes a pattern.

If there are two numbers, assume that they refer to two patterns and add the two numbers to obtain the score.

Use the following table to determine the code when the Gleason's score (2-10) or Gleason's pattern (1-5) is given.

<i>Gleason's Score</i>	<i>Gleason's Pattern</i>	<i>Description</i>	<i>Code</i>
2, 3, 4	1, 2	Well differentiated	1
5, 6	3	Moderately differentiated	2
7, 8, 9, 10	4, 5	Poorly differentiated	3

Example Adenocarcinoma of the prostate, Gleason 4 + 5 “ 9.
Code the tumor grade as: 3 - poorly differentiated

NOTE: Prior to January 1, 2003, a Gleason score of seven (7) is coded as a “2 - moderately differentiated.”

If expressed as a specific number out of a total of ten, the first number given is the score.

Example Adenocarcinoma of the prostate, Gleason 3/10.
Code the tumor grade as: 1 - well differentiated

NOTE: Tumor Grade and AJCC Staging

The *AJCC Cancer Staging Manual* may state that specific histologies are to be considered a specific grade.

Follow AJCC instructions for “staging” only. Follow ICD-O-3 rules and rules in this section for assigning a grade to tumors recorded in your abstract.

The *AJCC Cancer Staging Manual* identifies the following sites in which tumor grade/differentiation is used to assign the AJCC Stage Group:

C48.0	Retroperitoneum and peritoneum (soft tissue sarcoma)
C38.0 - C38.3	Heart and mediastinum (soft tissue sarcoma)
C40._, C41._	Bone
C47._, C49._	Connective, subcutaneous and other soft tissue
C61.9	Prostate gland
C73.9	Thyroid (undifferentiated carcinoma only)

DIAGNOSTIC TESTING

Descriptions of procedures performed to determine the method of diagnosis are listed below. A low number takes precedence over all higher numbers regardless of the type of procedure performed.

Positive Histology

Use code 1 for the following methods of diagnoses.

1. Bone Marrow Biopsy - examination of a piece of bone marrow by puncture or trephine (removing a circular disc of bone) for possible diagnosis of leukemia or multiple myeloma
2. Curettage - removal of growths or other material by scraping with a curette (D&C)
3. Excisional Biopsy - the removal of a growth in its entirety and having a therapeutic as well as diagnostic purpose
4. Frozen Section - a thin slice of tissue cut from a frozen specimen, often used for rapid microscopic diagnosis
5. Hematologic examination - microscopic examination of the cells of the blood or blood-forming tissues (especially bone marrow) for possible diagnosis of leukemia or multiple myeloma
6. Incisional Biopsy - incomplete removal of a growth for the purpose of diagnostic study
7. Punch Biopsy - biopsy of material obtained from the body tissue by a punch technique
8. Surface Biopsy - scraping of cells from surface epithelium, especially from the cervix, for microscopic examination
9. Surgical Biopsy - removal of tissue from the body by surgical excision for examination

Endoscopic Procedures

Use code 1 (histology) if a “piece of tissue” is taken and examined under a microscope.

Use code 2 (cytology) if “fluid” is taken and examined under a microscope.

Use code 6 (visualization) if no tissue or fluid is taken and a diagnosis of cancer is made.

Examples A patient undergoes a bronchoscopy with a bronchial washing.

Code the method of diagnosis as: 2 - cytology

A patient undergoes a colonoscopy with a biopsy of a mass.

Code the method of diagnosis as: 1 - histology

1. Bronchoscopy - examination of the bronchi
2. Colonoscopy - examination of the colon and rectum by means of an elongated flexible fiberscope
3. Colposcopy - examination of tissue of the cervix and vagina by use of a magnifying lens inserted into the vagina
4. Culdoscopy - visual examination of the female pelvic viscera by means of an endoscope introduced through the posterior vaginal wall into that part of the pelvic cavity known as the rectovaginal pouch or cul de sac
5. Cystoscopy - examination of the interior of the urinary bladder by means of a cystoscope
6. Esophagoscopy - observation of the interior of the esophagus
7. Gastroscopy - visual examination of the interior of the stomach
9. Laryngoscopy - examination of the larynx
10. Laparoscopy - examination of intra-abdominal structures by means of a illuminated tubular instrument inserted through a small incision in the abdominal wall
11. Mediastinoscopy - examination of the mediastinum by means of a tubular instrument permitting direct inspection of the area between the lungs
12. Nasopharyngoscopy - examination of the nasopharynx, pharynx, and the pharyngeal end of the auditory tube by lighted telescopic endoscope
13. Ophthalmoscopy - an examination in which an instrument containing a perforated mirror and lenses is used to examine the interior of the eye
14. Otoscopy - inspection of the internal ear
15. Panendoscopy - a cystoscopy that permits wide angle viewing of the urinary bladder
16. Peritoneoscopy - examination of the peritoneal cavity by an instrument inserted through the abdominal wall
17. Proctoscopy - inspection of the rectum

18. Sigmoidoscopy - inspection of the colon up to sigmoid flexure
19. Thoracoscopy - direct examination of the pleural cavity by means of an endoscope which is inserted into the cavity through an intercostal space

Positive Cytology

Use code 2 for the following methods of diagnoses.

1. Aspiration Biopsy - biopsy of material obtained by suction through a needle attached to a syringe
2. Brushings - the procedure of brushing the lining of an organ for the purpose of obtaining cells
3. Fine Needle Aspiration (FNA) - a hollow needle used for withdrawing fluid from a cavity
4. Paracentesis - surgical puncture of a cavity, such as the abdominal cavity, for aspiration of fluid
5. Punctures - inserting a hollow needle into a cavity or organ for the purpose of removal of some portion of the contents
6. Scraping - the procedure of scraping the lining of a structure with an instrument for the purpose of obtaining cells
7. Swab - using a swab or similar device to obtain fluid and secretions which then can be used to make a smear
8. Thoracentesis - surgical puncture for aspiration of fluid from the chest
9. Washings - the removal of fluid from a hollow organ or structure for the purpose of collecting cells

Visualization

Use code 6 for the following method of diagnosis.

1. Exploratory surgery - surgery is performed to determine whether or not a cancerous condition exists and the degree to which the cancer may have affected other organs and structures within the observed area; no biopsies are taken

Radiographic Examination

Use code 7 for the following methods of diagnoses.

Radiographic examination refers to a negative image on photographic film made by exposure to x-rays or gamma rays that have passed through matter or tissue.

1. Angiography - radiographic study of the vascular system
 - a. cerebral angiogram - x-ray of the vessels of the brain
 - b.. cardiac angiogram - x-ray showing the functions of the heart and large blood vessels
 - c. lymphangiogram - x-ray study of the vessels of the lymphatic system

- d. arteriography - x-ray examination of arteries
- e. venography - x-ray examination of veins
- 2. Bronchography - radiographic study of the bronchi of the lung
 - a. bronchogram - x-ray of the bronchial system
- 3. Cholecystography - radiologic study of the function of the gallbladder and bile ducts after an opaque medium has been introduced either orally or intravenously
 - a. cholangiogram - x-ray of extrahepatic ducts
 - b. cholecystogram - x-ray of the gallbladder
- 4. Computerized (Axial) Tomography (CT) - examination of body tissue; directs a thin, concentrated beam of radiation through a cross-section of the body to detectors; the technique involves recording of “slices” of the body with an x-ray scanner
- 5. Hysterosalpingography - radiography of the uterus and fallopian tubes after the injection of radiopaque material
- 6. Infusion Nephrotomography - radiographic visualization of the kidney by tomography after intravenous introduction of contrast medium
- 7. Intraoperative Imaging - an imaging procedure such as x-ray, CT scan, ultrasound, or mammogram that is performed during an operative procedure, e.g., to direct a biopsy or to verify the position of a prosthesis
- 8. KUB (Kidneys, Ureter, Bladder) - a frontal film of the abdomen taken in the supine position
- 9. Laminography - x-ray of a selected layer of the body; usually performed on joints and eye orbits
- 10. Lower GI series or Barium Enema - x-ray studies, following rectal injection of barium, of the large bowel; air and barium are used as contrast materials
- 11. Mammogram - several x-ray views are taken of one or both breasts and the radiographs are examined for the presence of a lesion, mass or calcification
- 12. Magnetic Resonance Imaging (MRI) - based on magnetization of the various biological tissues; does not use any ionizing radiation (such as x-rays) and is capable of direct imaging in any plane without reformatting
- 13. Myelography - radiologic study of the spinal cord
- 14. Positron Emission tomography (PET) - is a unique noninvasive technique that produces three-dimensional images within inside the human body. Compounds like glucose, oxygen, and carbon, which are found naturally in body chemistry, are labeled with signal-emitting tracers and injected into the body. All cells use this tracer, and cells with increased metabolism use more glucose. Because cancer cells are highly metabolic and use more glucose than normal cells, they

are easily seen on a PET scan.

15. Radioisotopes - substance administered to patients in order to diagnose disease in which the radioisotopes gather in the infected area emitting gamma rays from within the body which enable the physician to visualize internal abnormalities
16. Salpingography - radiologic study of the uterus and fallopian tubes
17. Sialography - radiologic study of the salivary ducts
18. Thermography - technique for detecting cancer by differentiating regions of hot and cold in the body; the surface temperature is photographically recorded
19. Tomography - a special x-ray technique to show in detail images of structures lying in a predetermined plane of tissue while blurring or eliminating detail in images of structures in other planes; usually performed on the kidneys
20. Upper GI series or Barium Swallow - x-ray studies, following ingestion of barium, of the pharynx, esophagus, stomach, and duodenum
21. Urography - radiologic study of the urinary tract
 - a. urogram - x-ray of the kidney and ureter with emphasis on the pelvis of the kidney by intravenous injection of a contrast medium
 - b. cystogram - x-ray of the urinary bladder by filling the bladder by catheterization with a contrast medium
 - c. IVP (intravenous pyelography) - a succession of x-ray films of the urinary tract following the injection into a vein of an iodine-containing substance which is collected by the kidneys, passing into the ureters and subsequently the bladder, allowing the study of urinary tract function
 - d. retrograde urography - examination of the ureter and renal collecting structures by means of instillation of contrast material through a ureteral catheter passed through a cystoscope into the bladder and ureter

SEER SUMMARY STAGE

Use SEER Summary Staging Manual - 2000, Codes and Coding Instructions for cases diagnosed *on or after* January 1, 2001. The summary stage should include all information available through completion of surgery(ies) in the *first course of treatment or within four months from the date of initial diagnosis*.

Download and print the SEER Summary Staging Manual from <http://seer.cancer.gov/tools/ssm/>. In addition, go to http://seer.cancer.gov/tools/ssm/errata_08202002.pdf to print off the corrections to the manual; be sure to make the corrections.

Summary staging is a method of organizing extent of disease data into groups which have prognostic significance. A staging system is a reference or chart which indicates the category into which a specific piece of information about a case fits.

Summary stage refers to the primary site ONLY.

Summary stage is required for ALL cases submitted to the Michigan Cancer Surveillance Program.

Summary stage consists of the following categories:

- 0 - In situ, Intraepithelial, Noninvasive, Noninfiltrating
- 1 - Localized ONLY (within organ)
- 2 - Regional by direct extension ONLY (to adjacent organs or tissues)
- 3 - Regional lymph node(s) involved ONLY
- 4 - Regional by BOTH direct extension AND regional lymph node(s) involved
- 5 - Regional, NOS (not otherwise specified)
- 7 - Distant site(s)/lymph node(s) involved or Systemic Disease
- 8 - BENIGN: only used when a previously submitted case has been determined to be non-reportable
- 9 - Unknown if extension or metastasis (unstaged, unknown or unspecified)
Unknown primary site
Death certificate only case
Class of case 3 or 4 when stage at initial diagnosis is unknown

Summary stage for all sites is based on pathologic, operative and clinical assessments with the pathologic examination taking precedence. It is important to read the pathology and operative reports for evidence of spread, microscopic extension and metastasis, as well as diagnostic imaging reports for mention of distant disease.

Exclude metastasis or disease progression that develops after the four month interval.

Apply the same rules when autopsy reports are used to stage the disease.

If it is not definitively known whether the tumor is in-situ or invasive, the suspected or probable status should be reported.

If the primary site is unknown, the SEER Summary Stage 2000 MUST be coded as A9 - unknown.”

The following definitions may be helpful in determining the most appropriate stage.

1. In Situ ONLY (Code 0)

- a. in situ means “in place”
- b. presence of malignant cells within the cell group from which they arose
- c. no penetration of the basement membrane of the tissue
- d. no stromal invasion
- e. applies to epithelial tissue only (no such thing as “sarcoma in situ”)
- f. if shown to be micro invasive, case is considered localized
- g. the following terms are to be interpreted as in situ:

Bowen’s Disease (not skin)
CIN III
Clark’s Level I for melanoma
Hutchinson’s melanotic freckle, NOS
intracystic non-infiltrating
intraductal
intra-epithelial
no penetration of basement membrane of the tissue
lobular neoplasia
lobular, non-infiltrating
non-infiltrating
non-invasive
no stromal invasion
precancerous melanosis
Queyrat’s erythroplasia
VAIN III
VIN III

Examples Left breast mastectomy - intraductal carcinoma in LIQ, lymph nodes negative.
 Code stage as: 0 - in situ

Bladder, transurethral resection - noninvasive papillary transitional cell carcinoma, Grade II. There is no invasion seen in the sections examined.
Code stage as: 0 - in situ

2. Localized ONLY (Code 1)

- a. malignancy limited to organ of origin
- b. no spread beyond organ of origin
- c. infiltration past basement membrane of epithelium into the functional part of the organ, but no spread beyond the boundaries of the organ

- d. tumor can be widely invasive or even show metastasis within the organ itself and still be considered "confined to organ of origin" or localized
- e. usually straightforward stage determination for organs which have definite boundaries (prostate, testis, stomach, etc.) or sites where there is a clear line between the organ of origin and the surrounding region (Exception: skin)
- f. for internal organs - it is generally impossible to determine whether the tumor is localized without exploratory surgery
- h. if the pathology report, operative report and other investigations show no evidence of spread, tumor may be assumed to be localized
- i. when staging cases diagnosed clinically, it is better to record stage as "stage not recorded" rather than "localized" when there is no other evidence of spread
- j. recognize the names of different structures within the organ (such as lamina propria, myometrium, muscularis) so that reference to invasion of such structures will not be interpreted as regional spread

Examples Subtotal colectomy - ascending colon, moderately differentiated adenocarcinoma invasion through the muscularis propria; no invasion of the pericolic fat; fifteen paracolic lymph nodes negative.
Code stage as: 1 - localized

Laryngectomy - squamous cell carcinoma of the larynx invading the true vocal cords, false vocal cords and intrinsic muscles.
Code stage as: 1 - localized

NOTE: When the primary site is bone marrow (C42.1) or blood (C42.0), the SEER Summary Stage is either "localized" or "distant" depending upon the histology. Refer to page 280 in the SEER Staging Manual for a list of the histologies and the appropriate stage.

3. **Regionalized (Codes 2, 3, 4, & 5)**

- a. tumor extension beyond the limits of the organ of origin
- b. area extending from the periphery of an involved organ that lends itself to removal en bloc with a portion of - or an entire - organ with outer limits to include at least the first level nodal basin
- c. delineation of the outer limit between regional and distant spread is not always clear
- d. en bloc resection may not always be feasible or may have been shown not to be necessary
- e. regional stage has several subcategories, each of which is described in detail below along with examples
 - 1. **regional by direct extension only (code 2):** invasion through entire wall of organ into surrounding organ and/or adjacent tissues (direct extension or contiguous spread)

Examples Radical prostatectomy - invasive adenocarcinoma of the prostate; adenocarcinoma invades into and involves the left seminal vesicle; iliac lymph nodes negative.

Code stage as: 2 - regional, direct extension

Radical cystectomy - invasive papillary transitional cell carcinoma of the bladder; carcinoma invading the ureter and prostate; iliac lymph nodes negative.

Code stage as: 2 - regional, direct extension

2. **regional lymph node(s) involved only (code 3):** tumor invasion of walls of lymphatic where cells can travel through lymphatic vessels to regional lymph nodes where they are filtered out and begin to grow in the nodes

Refer to page 284 in the SEER Summary Staging Manual 2000 for a list of Lymph Node Synonyms.

Examples Radical mastectomy - invasive ductal carcinoma of the breast; metastatic adenocarcinoma in one of eleven axillary lymph nodes.

Code stage as: 3 - regional, lymph nodes

Radical nephrectomy - invasive renal cell carcinoma; metastatic carcinoma in three of seven renal hilar lymph nodes; biopsy of diaphragm negative.

Code stage as: 3 - regional, lymph nodes

3. **regional by both direct extension and regional lymph node(s) involved (code 4):** a combination of direct extension and lymph node involvement
Code 2 + Code 3 = Code 4

Examples Resection of right colon - moderate to poorly differentiated Grade III/III adenocarcinoma arising from the mucosa, invading into pericolic fat; one of twenty pericolic and mesenteric lymph nodes positive for adenocarcinoma.

Code stage as: 4 - regional by BOTH direct extension AND lymph node involvement

Left pneumonectomy - invasive squamous cell carcinoma of the left lung invading the pleura; metastatic carcinoma in two of nine carinal lymph nodes.

Code stage as: 4 - regional by BOTH direct extension AND lymph node involvement

4. **regional, NOS (code 5):** may be used when it is unclear whether the tissues are involved by direct extension or lymph nodes, or when the other categories are not applicable, such as for staging Non-Hodgkin and Hodgkin Lymphoma of more than one lymph node chain

Example Diffuse, large cell, non-cleaved lymphoma involving the mesenteric and ileocolic lymph nodes.

Code stage as: 5 - regional, NOS

NOTE: Refer to page 277 in the SEER Summary Staging Manual 2000 for a list of the lymph nodes and lymphatic structures above and below the diaphragm.

Clinicians and pathologists use some terms interchangeably which may make it difficult when determining the stage. It is important to understand the words used to describe the spread of cancer.

1. “Local” as in carcinoma of the stomach with involvement of the local lymph nodes. Local nodes are the first group of nodes to drain the primary. Unless evidence of distant spread is present, such a case should be staged as regional, NOT local.
2. “Metastasis” as in carcinoma of lung with peribronchial lymph node metastasis. Metastasis in this sense means involvement by tumor. Such a case would still be regionalized, NOT distant. Learn the regional nodes for each primary site.

4. Distant site(s)/lymph node(s) or Systemic Disease (Code 7)

a. tumor cells which have been broken away from the primary tumor, traveled to other parts of the body and have begun to grow at the new location

b. distant stage is also called:

- remote
- disseminated
- diffuse
- metastatic (be careful, this may be regional metastasis)
- secondary disease

c. cancer cells can travel from the primary site in any of four ways:

1. Extension from primary organ beyond adjacent tissue into next organ.

i.e.: lung → pleura → bone

2. Travel in lymph channels beyond the first (regional) drainage area. Tumor cells can be filtered, trapped and begin to grow in any lymph nodes in the body.

i.e.: lung → scalene lymph nodes

3. Hematogenous or blood-borne metastases. Invasion of blood vessels within the primary tumor (veins are more susceptible to invasion than thicker-walled arteries) allows escape of tumor cells or tumor emboli which are transported through the blood stream to another part of the body where it lodges in a capillary or arteriole. At that point the tumor penetrates the vessel wall and grows back into the surrounding tissue.

4. Spread through fluids in a body cavity. Malignant cells rupture the surface of the primary tumor and are released into the thoracic or peritoneal cavity. They float in the fluid and can land on and begin to grow on any tissue reached by the fluid. This type of spread is also called implantation or seeding metastases. Some tumors form large quantities of fluid called ascites that can be removed, but the fluid rapidly re-accumulates.

NOTE: The presence of fluid or ascites does not automatically indicate dissemination. There must be cytologic evidence of malignant cells.

d. common sites of spread include *brain, bone, liver and lung*; these organs receive blood flow from all parts of the body. Review the staging scheme for the specific site to make sure disease is not regional extension.

Examples Right hemicolectomy - moderately differentiated, Grade I-II/III colonic adenocarcinoma invading into the pericolic fat; eight out of eight pericolic lymph nodes showing reactive lymphoid hyperplasia with no evidence of malignancy; biopsy of a mass on the left ovary shows metastatic moderately differentiated Grade II/III adenocarcinoma consistent with colon primary.

Code stage as: 7 - distant

Radical prostatectomy - invasive adenocarcinoma of the prostate; metastatic adenocarcinoma in four of six inguinal lymph nodes.

Code stage as: 7 - distant

NOTE: When the primary site is bone marrow (C42.1) or blood (C42.0), the SEER Summary Stage is either 'localized' or 'distant' depending upon the histology. Refer to page 280 in the staging manual for a list of the histologies and the appropriate stage.

5. Unknown if extension or metastasis or Unstaged (Code 9)

a. for an unknown primary site (C80.9), the summary stage MUST be A9 - Unknown."

b. there will be cases for which sufficient evidence is not available to adequately assign a stage

Examples When a patient expires before workup is completed.
When a patient refuses a diagnostic or treatment procedure.
When there is limited workup due to the patient's age or a simultaneous condition.

c. if sufficient information does not exist, the case can not be staged

d. use unknown stage sparingly - contact the physician to see if there is more information about the case which is not in the record.

e. if sufficient information does not exist, DO NOT guess; there is no choice but to mark the case as unknown.

f. death certificate only cases are coded to "9 - Unknown"

COLLABORATIVE STAGING

The Collaborative Staging System schemas consist of the 15 data fields necessary to derive T, N, M, and Stage Group according to the sixth edition of the *AJCC Cancer Staging Manual*; *Summary Stage 1977*; and *SEER Summary Stage 2000*.

Download and print manual from <http://www.cancerstaging.org/cstage/manuals.html>

Collaborative Staging is collected on all cases regardless of whether they are microscopically confirmed.

Note: This procedure focuses on only the Collaborative Staging data fields and assumes other registry operations such as case finding, completion of text fields and other data fields, edit checking and case submission are also being performed appropriately.

1. Before you begin to code using the Collaborative Staging System, read completely the general rules in the manual.
2. Read the medical record carefully to determine the primary site and histology and identify the correct ICD-O-3 codes. While you are reviewing the record, make mental notes about the tissues and lymph nodes that are involved by tumor.
3. If the histology is melanoma (8720-8790), Kaposi sarcoma (9140), retinoblastoma (9510-9514), lymphoma (9590-9699 and 9702-9729), mycosis fungoides (9700-9701), or hematopoietic and reticuloendothelial system (9731-9989), use the histology-specific schema for the appropriate histology-site combination.
4. Otherwise, turn to the correct site-specific schema in Part II of this manual. Schemas are in ICD-O-3 order by the first code that uses the schema. Verify that you are in the correct chapter by confirming that the code is in the list at the beginning of the schema.
5. Begin assigning codes for the 15 fields in the Collaborative Staging System. Be sure to read the notes and follow the site/histology-specific instructions at the beginning of each data field. Some schemas may have site-specific factors associated with extension, lymph nodes or metastasis; keep these in mind as you assign the codes.
 - a. Code the tumor size in the CS Tumor Size field.
 - b. Code how far the tumor has directly spread in the CS Extension field.
 - c. Code how the farthest tumor spread was determined in the CS Tumor Size/Ext Eval field.
 - d. Code whether regional lymph nodes are involved in the CS Lymph Nodes field.
 - e. Code how the farthest regional node spread was determined in the CS Reg Node Eval field.
 - f. Code the farthest distant metastasis (including distant lymph nodes) in the CS Mets at Dx field.
 - g. Code how the distant metastasis was determined in the CS Mets Eval field.
 - h. Code the six site-specific factors. If the first site-specific factor is listed as “Not Applicable” code 888 in all site specific factors. Otherwise, code the specific information requested for each site specific factor. When the next site-specific factor is 888 Not Applicable, all the remaining site-specific factors will also be 888.

Choosing the Correct Coding Schema for a Case

Most of the Collaborative Staging System schemas apply to cases defined by their primary site codes in ICD-O-3. A few of the schemas apply to cases defined by their histologic type codes in ICD-O-3, and these schemas take precedence over the schema for the site. The histologically defined schemas are shown in Table 3.

TABLE 3. HISTOLOGY-SPECIFIC CODING SCHEMAS

Melanoma (ICD-O-3 morphology codes 8720-8790)
Kaposi sarcoma (9140)
Retinoblastoma (9510-9514)
Lymphoma (9590-9699 and 9702-9729)
Mycosis Fungoides (9700-9701)
Hematopoietic and reticuloendothelial system (9731-9989)

Melanomas are further broken down by primary site code, as follows:

Malignant melanoma of the skin, vulva, penis and scrotum (C44.0-C44.9, C51.0-C51.2, C51.8-C51.9, C60.0-C60.1, C60.8-C60.9, C63.2)
Malignant melanoma of conjunctiva (C69.0)
Malignant melanoma of iris and ciliary body (C69.4)
Malignant melanoma of choroid (C69.3)
Malignant melanoma of other eye (C69.1, C69.2, C69.5, C69.8-C69.9)

For cases with all other histologic types, the correct schema to use is determined by the primary site code.

Each schema clearly states the applicable primary site codes and histologic type codes at the beginning of the schema.

QUALITY CONTROL

Quality control measures are essential to establish accuracy, completeness and consistency of reporting within the registry. Internal quality control relates to the process that is established to check for errors and discrepancies as reports come into the registry from the reporting facilities. External quality control is a method that checks for errors and discrepancies at the reporting facility.

NOTE: Some of the edit checks are prompts to review unusual data such as a prostate gland cancer in a man less than 45 years of age. If it is something rare, please review it with your pathologist.

A. INTERNAL QUALITY CONTROL

Proper Completion

As the reports are received, they are reviewed for consistency and completeness. Whenever a case is incomplete or inconsistent relative to an essential data item or items the department will query the reporting facility to clarify the case. A copy of the report in question is sent to the reporting facility with a request to clarify or complete the essential data item or items. However, it is customary to make a telephone call rather send out a letter requesting clarification.

Those essential data items and the more common problems that are routinely queried are:

Patient's first name	if blank or inconsistent, unknown or illegible
Patient's last name	if blank or unknown or illegible
Complete address	if blank, illegible or inconsistent
Sex	if blank or inconsistent with name or site
Date of Birth	if blank or inconsistent with site, report date, or date of diagnosis
Social Security Number	if blank
Primary site	if blank or inconsistent with histology
Laterality	if blank and a paired organ is reported for the primary site
Histology	if blank, if inconsistent with the primary site or it indicates the condition may not be reportable
Stage	if inconsistent with histology, blank, or, for TNM values, not consistent with the AJCC staging system
Method of diagnosis	if blank or inconsistent as in an in situ diagnosis not based upon a microscopic method of diagnosis
Non-diagnostic method	if method of diagnosis is reported as cytology and the case is in situ, VIN III or CIN III, or a Pap smear, the case will be queried, to determine if a histological confirmation was obtained

Treatment	if blank and if the report is from a hospital with a cancer treatment center
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If the reporting facility cannot supply the needed data items requested, the next step is to query the attending physician. For such cases, the complete name and office address of the physician are requested from the reporting facility.

For independent laboratories that do not have access to necessary patient demographic information to complete the report, adding the name and office address of the doctor to the report is extremely helpful. This reference information on the physician should be added to the bottom of the cancer report form for any case with missing information. Be sure to supply the doctor's full name and complete mailing address.

1. Manual checks of new reports

Routine checking of incoming reports identifies problems early in the processing. Letters are prepared to survey the hospital, laboratory or doctor to obtain information or clarification on identified problems.

The situations that will result in a letter of inquiry include when:

- a. important information on the patient is missing
- b. the diagnosis is vague or not clearly a malignancy
- c. the diagnosis is an in situ lesion based upon a cytological diagnosis
- d. diagnostic information is missing
- e. logical inconsistencies are evident, such as date of birth that is the same as the date of the report, cancer sites that disagree with the patient's sex or sites and histologies that are not compatible

If reporting a case that will likely generate a query, such as a CIN III pap smear or a patient with an unknown residence, record the physician's name and address in the lower margin of the report. This information will allow the MCSP staff to contact the doctor directly.

2. Computer edit checks

A series of edit checks are employed to scan incoming data. Many of these checks are basic screens of the data to insure all codes are valid. Other edits are more complex. These include the standard edit checks for sex and site, site and histology, histology and stage and other edits patterned after those employed at the National Cancer Institute and as recommended by NAACCR. Problems identified by these edits may result in additional inquiries concerning a cancer report.

B. EXTERNAL QUALITY CONTROL

A quality control field representative will visit each contributing facility to conduct a review of the quality of the cancer reporting at that facility. The field representative will help the facility identify and

solve problems associated with case finding, timeliness, abstracting, reporting, etc. Facility staff responsible for submitting reports are encouraged to contact their quality control field representative with questions about cancer reports.

Facility Audit Procedure

As a requirement of the legislation governing the Michigan Cancer Surveillance Program, audits will be conducted at all reporting hospitals and laboratories once every three years. If a facility is identified during an audit to have significant problems with quality, completeness and efficiency of reporting, the facility will be audited once a year until they have reached an acceptable level of reporting.

Selecting Cases for Audit

A percentage of all accepted cases are re-abstracted in order to assess the accuracy of abstracting and interpretation of data definitions. These cases are selected and re-abstracted without reference to the original abstract. Discrepancies between abstract and re-abstract are discussed by the original abstractor and the field representative. The re-abstracting study is a tool by which the abstractor and the MCSP staff can identify areas of inconsistency and improve the overall reliability of the registry database.

1. The diagnosis year for audit should be the last complete year in which the department has successfully ran through edits. If the last year is incomplete for that specific facility, use discretion when selecting the diagnosis year for audit.

2. Using codes assigned to each case by the MCSP staff, a report is generated by diagnosis year for the facility that is being audited. The report should contain the following information.

- a. patient state file number
- b. patient full name
- c. social security number
- d. medical record number
- e. topography code
- f. year of diagnosis

3. The total number of reportable cases from the reporting facility for a specific diagnosis year is utilized to determine the number of cases to be audited. Select cases for the audit using the following criteria.

- a. If the number of reportable cases for a specific diagnosis year is 1 - 400, a minimum of forty (40) cases must be selected for review by MCSP staff.
- b. If the facility has less than forty (40) cases for the specific year being audited, combine two years of complete data to reach forty (40) cases.
- c. If the number of reportable cases for a specific diagnosis year is 401 - 800, select 10% of the cases for review.
- d. If the number of cases for a specific diagnosis year is 801 or more, a maximum of 80 cases will be selected for review.

4. A minimum of thirty (30) cases from a select group of primary anatomical sites will be audited for each facility with less than 300 cases. If the minimum number of cases selected for each assigned

primary anatomical site can NOT be reached, select additional cases from the facility's top five sites or other sites such as esophagus, larynx, pancreas, testis or pharynx. This is a recommended baseline and discretion should be used when selecting additional primary anatomical sites. The specific number of cases per primary anatomical site is as follows:

a. lymphoma	3
b. lung	3
c. prostate	3
d. colon	3
e. breast	3
f. unknown primary	3
g. urinary bladder	2
h. leukemia	2
i. cervix	2
j. kidney	2
k. ovary	2
l. rectum	2
m. liver	all
n. brain	all
o. unusual sites	discretion
Total	30+

5. A maximum of 100 cases from a select group of primary anatomical sites will be audited for each facility with more than 1,000 cases. If the maximum number of cases selected for each assigned primary anatomical site can NOT be reached, select additional cases from the facility's top five sites. This is a recommended baseline and discretion should be used when selecting additional primary anatomical sites. The specific number of cases per primary anatomical site is as follows:

a. lymphoma	10
b. lung	10
c. prostate	10
d. colon	10
e. breast	10
f. unknown primary	10
g. urinary bladder	5
h. leukemia	5
i. cervix	5
j. kidney	5
k. ovary	5
l. rectum	5
m. melanoma	5
n. esophagus	1
o. larynx	1
p. pancreas	1
q. testis	1
r. pharynx	1
s. liver	all
t. brain	all
u. any unusual site	discretion

Total

100+

6. The facility is mailed a list of the selected cases for review. The list will include at a minimum the following:

- a. patient's full name
- b. social security number
- c. medical record number
- d. primary anatomical site
- e. month of diagnosis
- f. year of diagnosis

7. During the audit, the facility will provide the following.

- a. Requested medical records pulled and available prior to the day of the audit.
- b. Access to the requested medical records and all information contained in them, as well as any additional medical records that may include further information.
- c. Adequate space where the medical records can be reviewed.
- d. Access to an outside phone line and power source for a laptop computer.

Master Disease Index Review

1. A Master Disease Index (MDI) from the facility for the same diagnosis year as the audit year will be requested. The ICD-9 codes identified in Sources for Casefinding are used by the facility to generate the MDI.

2. Patients seen at the facility as an inpatient and/or as an outpatient must be selected. If possible, the facility will eliminate any duplicates that may appear in the listing. If a patient is seen with active or previously diagnosed cancer and is admitted for an *unrelated* medical condition, exclude these patients from the main listing.

3. The MDI will be submitted the MCSP in an Excel file with the following information:

- a. patients full name (alphabetical order by last name)
- b. date of birth
- c. social security number
- d. ICD-9-CM diagnostic code
- e. admit date
- f. discharge date

4. Upon receipt of the file, it will be electronically compared to the cancer registry for complete casefinding.

5. A list identifying the cases that did NOT appear in the registry will be generated. This list will be sent back to the facility for verification of non-reportable conditions.

Pathology Review

In addition to the MDI comparison, a total of 120 pathology reports for the specific diagnosis year being

audited is required for additional case ascertainment. The pathology reports must be separated into reportable and non-reportable conditions, with the reportable conditions compared to the central cancer registry.

Data Items Reviewed During the Audit

Name of Patient	Medical Record Number	SEER Summary Stage
Street Address, City, Zip	Primary Site	Tumor Size
County	Paired Organ	AJCC – TNM Values
Social Security Number	Clinical/Histological Diagnosis	AJCC – Stage Group
Date of Birth	Cell Behavior	Date Therapy Began
Sex	Tumor Grade	Reason No Surgery
Race	Date of Diagnosis	Surgery Dates and Codes
Hispanic Origin	Method of Diagnosis	First Course of Treatment

Results of Data Items Reviewed

The data items reviewed having a discrepancy are categorized as either a major or minor discrepancy. The major and minor discrepancies are based upon the standards set forth by the North American Association of Central Cancer Registrars (NAACCR). For further information on the standards, refer to Appendix C in the Standards for Cancer Registries Volume III, Standards for Completeness, Quality, Analysis and Management of Data, September 2000.

The number of major and minor discrepancies, are entered into a weighted error discrepancy rate table. Weighting the rate acts as if each and every record submitted was reviewed during the audit. The following is a statistical summary of the weighted error rates along with the major and minor discrepancies identified for each data item reviewed.

The following table represents those data items that are reviewed during audit and which category (major vs minor) they are assigned to. In addition, the required percentage of accuracy is identified which entitles the facility to a Gold or Silver certificate.

Level of Accuracy Required			
<i>Data Item</i>	<i>Gold</i>	<i>Silver</i>	<i>MCSP Certification</i>
Completeness (<i>major discrepancy</i>)	95%	90-94%	X
Name of Patient			Not Established
<i>Major (incorrect name submitted)</i>			
<i>Minor (incorrect spelling)</i>			
Patient Demographics:			

<i>Major (county, state)</i>	99%	98%	X
<i>Minor (street address, city, zip)</i>	95%	90%	X
Marital Status (minor discrepancy)			Not Established
Social Security Number (major discrepancy)			Not Established
Date of Birth (major discrepancy)	99%	98%	X
Sex (major discrepancy)	99%	98%	X
Race (major discrepancy)	99%	98%	X
Hispanic Origin (minor discrepancy)			Future Certification
Medical Record Number (minor discrepancy)			Not Established
Primary Site			
<i>Major (difference in first three digits)</i>	98%	95-97%	X
<i>Minor (difference in third digit)</i>	90%	85-89%	X
Paired Organs (minor discrepancy)	99%	98%	X
Histology			
<i>Major (difference in first three digits)</i>	96%	92-95%	X
<i>Minor (difference in fourth digit)</i>	85%	80-84%	X
Cell Behavior (major discrepancy)	99%	98%	X
Tumor Grade (minor discrepancy)	95%	90-94%	
Date of Diagnosis			
<i>Major (different year, difference > 1 month)</i>	99%	98%	X
<i>Minor (same calendar year, but difference of 1 month)</i>	93%	90-92%	X
Method of Diagnosis			
<i>Major (1-4 versus 5-9)</i>	99%	98%	X
<i>Minor (difference in code within 1-4 or 5-9)</i>	97%	96%	X
General Summary Stage (major discrepancy)	85%	75%	Future Certification
Tumor Size (minor discrepancy)			Future Certification
AJCC - TNM Values (major discrepancy)			Not Established
AJCC - Stage Group (major discrepancy)			Not Established
Date Therapy Began			
<i>Major (difference > 1 month, no date versus date,</i>	98%	97%	

<i>unknown versus known month or year)</i>			
<i>Minor (difference < 1 month)</i>	96%	95%	
Reason No Surgery			
<i>Major (0,8,9 versus 1-7)</i>			Not Established
<i>Minor (0 versus 8-9 or difference in code 1-7)</i>			Not Established
Surgery Code			
<i>Major (no code versus code)</i>	98%	97%	
<i>Minor (difference in code)</i>	96%	95%	
Treatment Summary			
Biological Response Modifier			
Chemotherapy			
Immunotherapy			
Radiation			
<i>Major (no code or unknown versus code)</i>	95%	94%	
<i>Minor (difference in code)</i>	93%	92%	

DATA SERVICES PROVIDED TO FACILITIES

A variety of services are available to Michigan facilities providing cancer patient information to the Michigan Cancer Surveillance Program. These services are made available to support the research and planning efforts that facility staff determine are necessary and are particularly intended to aid in hospital cancer registry management and associated activities.

The key services available are:

- < Hospital Specific Data or Listings
- < Ad Hoc Statistical Data
- < Death Searches - Death Certificates
- < Death Indexes

- Microfich - from 1985 - 1995 (135mm)
- Data Files - from 1996 to current

- < Death Notices when Reported Patients Die

Includes deaths in Michigan and for many other states

For more information on these special services contact:

Glenn Copeland, Manager
Vital Records and Health Data Development Section
P.O. Box 30691, Lansing, Michigan 48909
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ABBREVIATIONS

ACoS	American College of Surgeons
ACS	American Cancer Society
CA	carcinoma/cancer
CNS	central nervous system
DX	diagnosis
F/U	follow-up
H&P	history & physical
H/O	history of
HX	history
ICD-9-CM	International Classification of Diseases - 9th revision Clinical Modification
ICD-O-3	International Classification of Diseases for Oncology, 3 rd Edition
INPT	inpatient
MCSP	Michigan Cancer Surveillance Program
MDCH	Michigan Department of Community Health
N/A	not applicable
NED	no evidence of disease
NCI	National Cancer Institute
NOS	not otherwise specified
NR	not reported
Outpt	outpatient
PE	physical examination
QC	quality control
R/O	rule out
Rx	treatment
SEER	surveillance, Epidemiology and End Results
Surg	surgery, surgical
TNM	Tumor, Node, Metastases (staging system of American Joint Committee for Cancer)

TR	Tumor Registry
UNK	unknown
WHO	World Health Organization

GLOSSARY OF TERMS

Abstract	A summary of a medical case history containing pertinent portions of the medical record.
Anatomic Site	Pertaining to anatomy, or to the structure of the organism.
Autopsy	The post mortem examination of a body.
Basal Cell	The predominant cell of the deepest layer of the epidermis.
Benign	Not malignant; not recurrent; favorable for recovery.
Bilateral Organs	Anatomic organs that exist on both sides of the body.
Biopsy	The removal and examination, usually microscopic, of tissue, performed to establish the characteristics of the neoplasm.
Blastoma	A neoplasm composed of embryonic cells.
Cancer	A malignant tumor.
Carcinoma	A malignant new growth made up of epithelial cells tending to infiltrate the surrounding tissues and give rise to metastases.
Case-Finding	Systematic identification of all reportable neoplasm cases in a facility.
Clinical Cases	Cancer cases not microscopically confirmed through biopsy.
Cytology	The microscopic examination of cells obtained by aspirations, washings, scrapings, and smears (such as pap smears).
Date of Diagnosis	Refers to the first diagnosis of the cancer by a recognized medical practitioner. This is usually the date of first positive tissue specimen.
Demography	The study of populations, especially with reference to size and density, fertility, mortality, growth, age distribution, migration and vital statistics, and the interaction of all these with social and economic conditions.
Diagnosis	The determination of the nature of disease.
Diagnosis Index	A listing of cases by date of discharge from the hospital arranged in diagnostic groupings according to a specific coding system.
Endothelium	The layer of epithelial cells that lines the cavities of the heart and of the blood and lymph vessels, and the serous cavities of the body.
Epidemiology	The study of the occurrence and distribution of disease.
Epithelium	The covering of internal and external surfaces of the body.

Exfoliative Cytology	Microscopic examination of cells shed from a body surface as a means of detecting malignant change.
Frozen Section	A slice cut by a special instrument, the microtome, from tissue that has been frozen.
Gross Anatomy	That which deals with structures that can be distinguished with the naked eye, also called macroscopic anatomy.
Gross Observation	Observations seen with the naked eye. (see gross anatomy).
Hematology	The science of blood, its nature, functions, and diseases.
Histology	The specialty of anatomy which deals with minute structures.
Laterality	A relationship to one side, denoting a position from the midline of the body.
Lesion	Any pathological or traumatic discontinuity of tissue or loss of function of a part.
Leukemia	A progressive, malignant disease of the blood-forming organs.
Lymphoma	A term used to describe any neoplastic disorder of the lymphoid tissue, including Hodgkin's disease.
Malignant	An uncontrolled, invasive growth capable of metastasizing, spreading to tumor a distant part of the body. Opposite of benign.
Microscopic Confirmation	The process of confirming the diagnosis of a neoplasm by examination of tissue through a microscope.
Morbidity	Any departure from a state of physiologic or psychological well-being.
Morphology	The science of the forms and structure of organized beings.
Myeloma	A tumor composed of cells of the type normally found in the bone marrow.
Neoplasm	A new growth.
Oncology	The sum of knowledge concerning tumors; the study of tumors.
Paired Site	See bilateral organs.
Papillary	Pertaining to or resembling a papilla, or nipple.
Pathology	That branch of medicine which treats the essential nature of disease, especially of

	the structural and functional changes in tissues and organs of the body which cause or are caused by disease.
Peritoneal Fluid	Fluid from the serous membrane lining the abdominopelvic walls and the viscera.
Pleural Fluid	Fluid from the serous membrane enveloping the lungs and lining the thoracic cavity, completely enclosing a potential space known as the pleural cavity.
Primary Site	The anatomic organ or tissue of the body where a cancer originates.
Rates	
Incidence Rate	The number of new cases of a disease occurring in a period of time divided by the number of persons at risk of becoming a case during that time. The result is frequently multiplied by a base number such as 1,000 or 100,000.
Death Rate	Computed in the same manner as an incidence rate except that deaths during the time period are used instead of new cases. The deaths may be for a specific cause or causes.
Mortality Rate	See death rate.
Specific Rates	
Age	An incidence or death rate calculated using data (cases, deaths, persons at risk) for a specific age group rather than for all ages.
Sex	An incidence or death rate calculated using data for one sex only.
Resection	Removal of a portion of an organ or other structure.
Sarcoma	A tumor made up of a substance like embryonic connective tissue.
Smear	A specimen for microscopic study prepared by spreading the material across a glass slide.
Tissue Specimen	A preparation of tissue for pathological examination.
Tumor	Classically means a swelling or mass; in current usage means a new growth of tissue or cells.
Validity	The closeness with which a measured value agrees with the "true" value which one desires to know.

FIPS County Codes for Use Beginning in 1997

Alcona	001	Leelanau	089
Alger	003	Lenawee	091
Allegan	005	Livingston	093
Alpena	007	Luce	095
Antrim	009	Mackinac	097
Arenac	011	Macomb	099
Baraga	013	Manistee	101
Barry	015	Marquette	103
Bay	017	Mason	105
Benzie	019	Mecosta	107
Berrien	021	Menominee	109
Branch	023	Midland	111
Calhoun	025	Missaukee	113
Cass	027	Monroe	115
Charlevoix	029	Montcalm	117
Cheboygan	031	Montmorency	119
Chippewa	033	Muskegon	121
Clare	035	Newaygo	123
Clinton	037	Oakland	125
Crawford	039	Oceana	127
Delta	041	Ogemaw	129
Dickinson	043	Ontonagon	131
Eaton	045	Osceola	133
Emmet	047	Oscoda	135
Genesee	049	Otsego	137
Gladwin	051	Ottawa	139
Gogebic	053	Presque Isle	141
Grand Traverse	055	Roscommon	143
Gratiot	057	Saginaw	145
Hillsdale	059	St. Clair	147
Houghton	061	St. Joseph	149
Huron	063	Sanilac	151
Ingham	065	Schoolcraft	153
Ionia	067	Shiawassee	155
Iosco	069	Tuscola	157
Iron	071	Van Buren	159
Isabella	073	Washtenaw	161
Jackson	075	Wayne	163
Kalamazoo	077	Wexford	165
Kalkaska	079	Out of State	998
Kent	081	Unknown	999
Keweenaw	083		
Lake	085		
Lapeer	087		

NAACCR Standard State Codes

Postal Codes for Residence State
SEER Codes for Birth Place

State	Residence	Birth Place	State	Residence	Birth Place
Alabama	AL	037	Rhode Island	RI	006
Alaska	AK	091	South Carolina	SC	026
Arizona	AZ	087	South Dakota	SD	055
Arkansas	AR	071	Tennessee	TN	031
California	CA	097	Texas	TX	077
Colorado	CO	083	Utah	UT	084
Connecticut	CT	007	Vermont	VT	004
Delaware	DE	017	Virginia	VA	023
District of Columbia	DC	022	Washington	WA	093
Florida	FL	035	West Virginia	WV	024
Georgia	GA	033	Wisconsin	WI	051
Hawaii	HI	099	Wyoming	WY	082
Idaho	ID	081	Puerto Rico	PR	101
Illinois	IL	061	Virgin Island	VI	102
Indiana	IN	045	Guam	GU	126
Iowa	IA	053	American Samoa	AS	121
Kansas	KS	065	Alberta	AB	224
Kentucky	KY	047	British Columbia	BC	226
Louisiana	LA	073	Northwest Ter.	NT	225
Maine	ME	002	Manitoba	MB	224
Maryland	MD	021	New Brunswick	NB	221
Massachusetts	MA	005	Newfoundland	NF	221
Michigan	MI	041	Nova Scotia	NS	221
Minnesota	MN	052	Ontario	ON	223
Mississippi	MS	039	Prince Edward Is.	PE	221
Missouri	MO	063	Québec	PQ	222
Montana	MT	056	Saskatchewan	SK	224
Nebraska	NE	067	Yukon	YT	225
Nevada	NV	085	Rest of World	XX	***
New Hampshire	NH	003	Unknown	YY	999
New Jersey	NJ	008			
New Mexico	NM	086			
New York	NY	011	*** For other Place of Birth Codes see Place of Birth Coding Listing		
North Carolina	NC	025			
North Dakota	ND	054			
Ohio	OH	043			
Oklahoma	OK	075			
Oregon	OR	095			
Pennsylvania	PA	014			

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ALPHABETICAL LISTING OF COUNTRIES

* *Effective cases diagnosed 1/1/1992.*

A

585 Abyssinia
629 Aden
583 Afars and Issas
638 Afghanistan
500 Africa
570 Africa, East
510 Africa, North
540 Africa, South
545 Africa, South West
530 Africa, West
580 African Coastal Islands (previously included in 540)
037 Alabama
091 Alaska
481 Albania
224 Alberta
513 Algeria
250 America, Central
265 America, Latin
260 America, North (use a more specific term; see also North America)
300 America, South
121 American Samoa
611 Anatolia
641 Andaman Islands
443 Andorra
520 Anglo-Egyptian Sudan
543 Angola
245 Anguilla
665 Annam
750 Antarctica
245 Antigua
245 Antilles, NOS
245 Antilles, Netherlands
625 Arab Palestine (former)
629 Arabia, Saudi
629 Arabian Peninsula
365 Argentina
087 Arizona
071 Arkansas
611 Armenia (Turkey)
633 Armenia (U.S.S.R.)
245 Aruba
600 Asia, NOS*
680 Asia, East
640 Asia, Mid-East
611 Asia Minor, NOS
610 Asia, Near-East

650 Asia, Southeast
620 Asian Arab Countries
634 Asian Republics of the former U.S.S.R.
109 Atlantic/Caribbean area, other U.S. possessions
100 Atlantic/Caribbean area, U.S. possessions
711 Australia
711 Australian New Guinea
436 Austria
633 Azerbaijan
633 Azerbaizhan S.S.R.
445 Azores

B

247 Bahamas, The
629 Bahrain
443 Balearic Islands
463 Baltic Republic(s), NOS
463 Baltic States, NOS
645 Bangladesh
245 Barbados
245 Barbuda
545 Basutoland
431 Bavaria
545 Bechuanaland
457 Belarus
541 Belgian Congo
433 Belgium
252 Belize
539 Benin
246 Bermuda
456 Bessarabia
643 Bhutan
539 Bioko (Fernando Poo)
452 Bohemia
355 Bolivia
545 Bophuthatswana
673 Borneo
453 Bosnia-Herzegovina
545 Botswana
341 Brazil
226 British Columbia
331 British Guiana
252 British Honduras
245 British Virgin Islands
245 British West Indies, NOS

671 Brunei
 454 Bulgaria
 520 Burkina Faso (Upper Volta)
 649 Burma (see Myanmar)
 579 Burundi
 457 Byelorussian S.S.R.

C

543 Cabinda
 245 Caicos Islands
 097 California
 663 Cambodia
 539 Cameroon
 220 Canada
 110 Canal Zone
 443 Canary Islands
 122 Canton Islands
 545 Cape Colony
 445 Cape Verde Islands
 245 Caribbean, NOS
 245 Caribbean Islands, other
 123 Caroline Islands
 711 Cartier Islands
 633 Caucasian Republics of the former U.S.S.R.
 245 Cayman Islands
 500 Central Africa, NOS
 539 Central African Republic
 250 Central America
 499 Central Europe, NOS
 060 Central Midwest States
 647 Ceylon (see Sri Lanka)
 520 Chad
 401 Channel Islands (British)
 361 Chile
 681 China, NOS
 665 China, Cochin
 682 China, People's Republic of
 684 China, Republic of
 723 Christmas Island
 545 Ciskei
 665 Cochin China
 711 Cocos (Keeling) Islands
 311 Colombia
 083 Colorado
 580 Comoros
 226 Columbia, British
 022 Columbia, District of
 539 Congo, NOS
 539 Congo-Brazzaville
 541 Congo-Leopoldville
 541 Congo, Belgian
 539 Congo, French

541 Congo Kinshasa
 007 Connecticut
 124 Cook Islands
 441 Corsica
 256 Costa Rica
 539 Cote d'Ivoire (Ivory Coast)
 471 Crete
 453 Croatia
 241 Cuba
 245 Curacao
 495 Cyprus
 517 Cyrenaica
 452 Czechoslovakia
 452 Czech Republic

D

539 Dahomey
 453 Dalmatia
 017 Delaware
 425 Denmark
 022 District of Columbia
 583 Djibouti
 449 Dobruja
 245 Dominica
 243 Dominican Republic
 673 Dutch East Indies
 332 Dutch Guiana

E

570 East Africa
 680 East Asia
 431 East Germany
 673 East Indies, Dutch
 645 East Pakistan
 499 Eastern Europe, NOS
 345 Ecuador
 519 Egypt
 410 Eire
 254 El Salvador
 125 Ellice Islands
 122 Enderbury Islands
 401 England
 122 Enterbury Islands
 500 Equatorial Africa, NOS
 539 Equatorial Guinea (Spanish Guinea)
 585 Eritrea
 458 Estonia
 458 Estonian S.S.R. (Estonia)
 585 Ethiopia
 499 Europe, NOS*

470 Europe, other mainland

F

425 Faroe (Faeroe) Islands
381 Falkland Islands
431 Federal Republic of Germany
123 Federated States of Micronesia
539 Fernando Poo
721 Fiji
429 Finland
035 Florida
684 Formosa
441 France
545 Free State (Orange Free State)
539 French Congo
333 French Guiana
725 French Polynesia
583 French Somaliland
530 French West Africa, NOS
245 French West Indies
721 Futuna

G

539 Gabon
345 Galapagos Islands
539 Gambia, The
631 Gaza Strip
033 Georgia (U.S.A.)
633 Georgia (U.S.S.R.)
431 German Democratic Republic
430 Germanic Countries
431 Germany
431 Germany, East
431 Germany, Federal Republic of
431 Germany, West
539 Ghana
485 Gibraltar
122 Gilbert Islands
471 Greece
210 Greenland
245 Grenada
245 Grenadines, The
245 Guadeloupe
126 Guam
251 Guatamala
401 Guernsey
331 Guiana, British
332 Guiana, Dutch
333 Guiana, French
539 Guinea
539 Guinea-Bissau (Portuguese
Guinea)

539 Guinea, Equatorial

— Guinea, New (see New Guinea)
539 Guinea, Portuguese
331 Guyana

H

242 Haiti
099 Hawaii
432 Holland
253 Honduras
252 Honduras, British
683 Hong Kong
475 Hungary

I

421 Iceland
081 Idaho
061 Illinois
641 India
045 Indiana
673 Indies, Dutch East
660 Indochina
673 Indonesia
053 Iowa
637 Iran
627 Iraq
620 Iraq-Saudi Arabian Neutral Zone
410 Ireland (Eire)
410 Ireland, NOS
404 Ireland, Northern
410 Ireland, Republic of
401 Isle of Man
631 Israel
583 Issas
447 Italy
539 Ivory Coast

J

244 Jamaica
423 Jan Mayen
693 Japan
673 Java
401 Jersey
631 Jewish Palestine
127 Johnston Atoll
625 Jordan

453 Yugoslavia

K

539 Kameroon
663 Kampuchea
065 Kansas
634 Kazakh S.S.R.
634 Kazakhstan
047 Kentucky
575 Kenya
634 Kirghiz S.S.R.
122 Kiribati
695 Korea
695 Korea, North
695 Korea, South
629 Kuwait
634 Kyrgystan
634 Kyrgyz

L

221 Labrador
661 Laos
420 Lapland, NOS
265 Latin America, NOS
459 Latvia
459 Latvian S.S.R. (Latvia)
623 Lebanon
245 Leeward Island, NOS
545 Lesotho
539 Liberia
517 Libya
437 Liechtenstein
122 Line Islands, Southern
461 Lithuania
461 Lithuanian S.S.R. (Lithuania)
073 Louisiana
434 Luxembourg

M

686 Macao
686 Macau
453 Macedonia
555 Madagascar
445 Madeira Islands
002 Maine
555 Malagasy Republic
551 Malawi
671 Malay Peninsula
671 Malaysia
640 Maldives
520 Mali
491 Malta

224 Manitoba

129 Mariana Islands
221 Maritime Provinces, Canada
131 Marshall Islands
245 Martinique
021 Maryland
005 Massachusetts
520 Mauritania
580 Mauritius
580 Mayotte
490 Mediterranean Islands, Other
721 Melanesian Islands
610 Mesopotamia, NOS
230 Mexico
041 Michigan
123 Micronesian Islands
640 Mid-East Asia
132 Midway Islands
052 Minnesota
249 Miquelon
039 Mississippi
063 Missouri
456 Moldavia
456 Moldavian S.S.R.
456 Moldova
441 Monaco
691 Mongolia
056 Montana
453 Montenegro
245 Montserrat
452 Moravia
511 Morocco
080 Mountain States
553 Mozambique
629 Muscat
649 Myanmar (see Burma)

N

545 Namibia
133 Nampo-shoto, Southern
545 Natal
723 Nauru
610 Near-East Asia
067 Nebraska
643 Nepal
432 Netherlands
245 Netherlands Antilles
332 Netherlands Guiana
085 Nevada
245 Nevis

221 New Brunswick
 725 New Caledonia
 001 New England
 673 New Guinea, except Australian and
 North East
 711 New Guinea, Australian
 711 New Guinea, North East
 003 New Hampshire
 721 New Hebrides
 008 New Jersey
 086 New Mexico
 011 New York
 715 New Zealand
 221 Newfoundland
 255 Nicaragua
 520 Niger
 531 Nigeria
 715 Niue
 510 North Africa, NOS
 260 North America, NOS (use more
 specific term if possible)
 240 North American Islands
 671 North Borneo (Malaysia)
 025 North Carolina
 040 North Central States
 054 North Dakota
 711 North East New Guinea
 695 North Korea
 010 North Mid-Atlantic States
 499 Northern Europe, NOS
 404 Northern Ireland
 129 Northern Mariana Islands
 050 Northern Midwest States
 549 Northern Rhodesia
 711 Norfolk Island
 225 Northwest Territories (Canada)
 423 Norway
 998 Not United States, NOS
 221 Nova Scotia
 227 Nunavut
 551 Nyasaland

O

720 Oceania
 043 Ohio
 075 Oklahoma
 629 Oman
 223 Ontario
 545 Orange Free State
 095 Oregon
 403 Orkney Islands

P

120 Pacific area, U.S. possessions
 720 Pacific Islands
 123 Pacific Islands, Trust Territory of
 the (code to specific islands if
 possible)
 090 Pacific Coast States
 639 Pakistan
 645 Pakistan, East
 639 Pakistan, West
 139 Palau (Trust Territory of the Pacific
 Islands)
 625 Palestine, Arab
 631 Palestine, Jewish
 631 Palestine, NOS
 631 Palestinian National Authority--PNA
 257 Panama
 711 Papua New Guinea
 371 Paraguay
 014 Pennsylvania
 629 People's Democratic Republic of
 Yemen
 682 People's Republic of China
 637 Persia
 629 Persian Gulf States, NOS
 351 Peru
 675 Philippine Islands
 675 Philippines
 122 Phoenix Islands
 725 Pitcairn Islands
 451 Poland
 725 Polynesian Islands
 445 Portugal
 539 Portuguese Guinea
 224 Prairie Provinces, Canada
 221 Prince Edward Island
 543 Principe
 101 Puerto Rico

Q

629 Qatar
 222 Quebec

R

684 Republic of China
 545 Republic of South Africa
 580 Reunion
 006 Rhode Island
 547 Rhodesia
 549 Rhodesia, Northern
 547 Rhodesia, Southern
 539 Rio Muni
 440 Romance-language Countries
 449 Romania
 449 Roumania
 577 Ruanda
 449 Rumania
 455 Russia, NOS
 457 Russia, White
 455 Russian Federation (former
 U.S.S.R.)
 455 Russian S.F.S.R.
 577 Rwanda
 134 Ryukyu Islands (Japan)

S

520 Sahara, Western (Spanish)
 121 Samoa, American
 725 Samoa, Western
 245 St. Christopher-Nevis
 580 St. Helena
 245 St. Kitts
 245 St. Lucia
 249 St. Pierre
 245 St. Vincent
 447 San Marino
 543 Sao Tome
 447 Sardinia
 224 Saskatchewan
 629 Saudi Arabia
 420 Scandinavia
 403 Scotland
 539 Senegal
 453 Serbia
 580 Seychelles
 403 Shetland Islands
 651 Siam
 447 Sicily
 539 Sierra Leone
 643 Sikkim
 671 Singapore
 450 Slavic Countries
 453 Slavonia
 452 Slovak Republic
 452 Slovakia

453 Slovenia
 721 Solomon Islands
 581 Somali Republic
 581 Somalia
 581 Somaliland
 583 Somaliland, French
 540 South Africa
 545 South Africa, Republic of
 545 South Africa, Union of
 300 South America
 380 South American Islands
 026 South Carolina
 055 South Dakota
 695 South Korea
 020 South Mid-Atlantic States
 545 South West Africa
 650 Southeast Asia
 030 Southeastern States
 499 Southern Europe, NOS
 122 Southern Line Islands
 070 Southern Midwest States
 133 Southern Nampo-shoto
 547 Southern Rhodesia
 629 Southern Yemen
 — Soviet Union (see individual
 republics)
 443 Spain
 520 Spanish Sahara
 647 Sri Lanka (see Ceylon)
 520 Sudan (Anglo-Egyptian Sudan)
 520 Sudanese Countries
 673 Sumatra
 332 Suriname
 423 Svalbard
 135 Swan Islands
 545 Swaziland
 427 Sweden
 435 Switzerland
 621 Syria

T

634 Tadzhik S.S.R.
 684 Taiwan
 634 Tajikistan
 571 Tanzania
 571 Tanganyika
 571 Tanzanyika
 031 Tennessee
 077 Texas
 651 Thailand (Siam)
 685 Tibet
 245 Tobago

539 Togo
 136 Tokelau Islands
 725 Tonga
 665 Tonkin
 625 Trans-Jordan
 545 Transkei
 545 Transvaal
 449 Transylvania
 245 Trinidad
 517 Tripoli
 517 Tripolitania
 629 Trucial States
 515 Tunisia
 611 Turkey
 634 Turkmen S.S.R.
 634 Turkmenistan
 245 Turks Islands
 125 Tuvalu

U

573 Uganda
 456 Ukraine
 456 Ukranian S.S.R.
 404 Ulster
 545 Union of South Africa
 — Union of Soviet Socialist Republics
 (U.S.S.R.) (see individual
 republics)
 629 United Arab Emirates
 519 United Arab Republic
 400 United Kingdom
 000 United States
 102 U.S. Virgin Islands
 999 Unknown
 520 Upper Volta
 375 Uruguay
 579 Urundi
 084 Utah
 634 Uzbekistan
 634 Uzbek S.S.R.

V

721 Vanuatu
 447 Vatican City
 545 Venda
 321 Venezuela

004 Vermont
 665 Vietnam
 245 Virgin Islands (British)
 102 Virgin Islands (U.S.)
 023 Virginia

W

137 Wake Island
 402 Wales
 449 Wallachia
 721 Wallis
 093 Washington (state)
 022 Washington D.C.
 530 West Africa, NOS
 539 West African Countries, other
 631 West Bank
 431 West Germany
 245 West Indies, NOS (see also
 individual islands)
 639 West Pakistan
 024 West Virginia
 499 Western Europe, NOS
 520 Western (Spanish) Sahara
 725 Western Samoa
 457 White Russia
 245 Windward islands
 051 Wisconsin
 082 Wyoming

Y

629 Yemen
 629 Yemen, People's Democratic
 Republic of
 453 Yugoslavia (former Yugoslavia
 region)
 225 Yukon Territory

Z

541 Zaire
 549 Zambia
 571 Zanzibar
 547 Zimbabwe

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NOTE: This may not be a complete listing of the references used to develop this manual.